



**NSAI**  
Standards

Irish Standard  
I.S. EN 50441-2:2012

# Cables for indoor residential telecommunication installations -- Part 2: Screened cables - Grade 1

## I.S. EN 50441-2:2012

*Incorporating amendments/corrigenda issued since publication:*

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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Údarás um Chaighdeáin Náisiúnta na hÉireann		

English version

**Cables for indoor residential telecommunication installations -  
Part 2: Screened cables -  
Grade 1**

Câbles pour les installations résidentielles  
de télécommunications en intérieur -  
Partie 2: Câbles écrantés -  
Classe 1

Innenkabel für  
Telekommunikationseinrichtungen im  
Wohnbereich -  
Teil 2: Geschirmte Innenkabel -  
Klasse 1

This European Standard was approved by CENELEC on 2012-01-23. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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 document (EN 50441-2:2012) has been prepared by SC 46XC, "Multicore, multipair and quad data communication cables", of CLC/TC 46X, "Communication cables".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-01-23
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2015-01-23

This document supersedes EN 50441-2:2006.

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).

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## 1 Scope

This European Standard specifies the constructional details and performance requirements for cables for indoor Residential Cabling Systems characterized up to 100 MHz. Cables in this European Standard are based on the common design rules specified in EN 50290-2-1 and are specifically intended for supporting ICT and BCT applications (telephone, computer and TV services) as specified in EN 50173-4.

The cables covered in this European Standard are intended to operate with voltages and currents normally encountered in communication systems. These cables are not intended to be used in conjunction with low impedance sources, for example, the electrical power supply of public utility mains.

Cables covered in this European Standard may however be subjected to voltages of not more than 300 V a.c. or 450 V d.c and comply with the requirements of the Low Voltage Directive.

The maximum current rating per conductor is 3 A/mm<sup>2</sup> unless otherwise specified in the relevant detail specification.

## 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.

EN 50173-1	<i>Information technology – Generic cabling systems - Part 1: General requirements</i>
EN 50289-1-2	<i>Communication cables – Specifications for test methods - Part 1-2: Electrical test methods – DC resistance</i>
EN 50289-1-3	<i>Communication cables – Specifications for test methods – Part 1-3: Electrical test methods – Dielectric strength</i>
EN 50289-1-4	<i>Communication cables – Specifications for test methods – Part 1-4: Electrical test methods – Insulation resistance</i>
EN 50289-1-6	<i>Communication cables – Specifications for test methods – Part 1-6: Electrical test methods – Electromagnetic performance</i>
EN 50289-1-7	<i>Communication cables – Specifications for test methods – Part 1-7: Electrical test methods – Velocity of propagation</i>
EN 50289-1-8	<i>Communication cables – Specifications for test methods – Part 1-8: Electrical test methods – Attenuation</i>
EN 50289-1-9	<i>Communication cables – Specifications for test methods – Part 1-9: Electrical test methods – Unbalance attenuation (longitudinal conversion loss, longitudinal conversion transfer loss)</i>
EN 50289-1-10	<i>Communication cables – Specifications for test methods – Part 1-10: Electrical test methods – Crosstalk</i>
EN 50289-1-11	<i>Communication cables – Specifications for test methods – Part 1-11: Electrical test methods – Characteristic impedance, input impedance, return loss</i>
EN 50289-3-7	<i>Communication cables – Specifications for test methods – Part 3-7: Mechanical test methods – Abrasion resistance of the cable sheath</i>
EN 50289-3-9:2001	<i>Communication cables – Specifications for test methods – Part 3-9: Mechanical test methods – Bending tests</i>
EN 50289-3-17	<i>Communication cables – Specifications for test methods – Part 3-17: Mechanical test methods – Adhesion of dielectric and sheath</i>

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