
**Materiali za tiskane plošče in druge povezovalne strukture -2-21. del:
Pokovinjeni in nepokovinjeni ojačeni osnovni materiali - Z bakrom
pokovinjeni laminat z določeno gorljivostjo (navpični preskus gorljivosti),
ojačen z nehalogeniziranim epoksidnim epoksidnim tkanim E-steklom (IEC
61249-2-21:2003)***

Materials for printed boards and other interconnecting structures - Part 2-21:
Reinforced base materials, clad and unclad - Non-halogenated epoxide woven E-
glass reinforced laminated sheets of defined flammability (vertical burning test),
copper-clad (IEC 61249-2-21:2003)

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Materials for printed boards and other interconnecting structures
Part 2-21: Reinforced base materials, clad and unclad –
Non-halogenated epoxide woven E-glass
reinforced laminated sheets of defined flammability
(vertical burning test), copper-clad
(IEC 61249-2-21:2003)

Matériaux pour circuits imprimés et autres
structures d'interconnexion

Partie 2-21: Matériaux de base renforcés

plaqués et non plaqués –

Feuilles stratifiées renforcées en tissu

de verre de type E époxyde non halogéné,

d'inflammabilité définie (essai de combustion

verticale) plaquées cuivre

(CEI 61249-2-21:2003)

Materialien für Verbindungsstrukturen

Teil 2-21: Kaschierte und unkaschierte

verstärkte Basismaterialien –

Kupferkaschierte mit E-Glasgewebe

verstärkte Laminattafeln auf der Basis

von halogenfreiem Epoxidharz

mit definierter Brennbarkeit

(Brennprüfung mit vertikaler Prüflingslage)

(IEC 61249-2-21:2003)

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 91/409/FDIS, future edition 1 of IEC 61249-2-21, prepared by IEC TC 91, Electronics assembly technology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61249-2-21 on 2003-12-01.

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) 2004-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2006-12-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative and annexes A, B and C are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61249-2-21:2003 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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 (including amendments).

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 61189-2 + corr. June	1997 1997	Test methods for electrical materials, printed boards and other interconnection structures and assemblies Part 2: Test methods for materials for interconnection structures	EN 61189-2 + corr. August	1997 1997
IEC 61249-5-1	1995	Materials for interconnection structures Part 5: Sectional specification set for conductive foils and films with or without coatings - Section 1: Copper foils (for the manufacture of copper-clad base materials)	EN 61249-5-1	1996
ISO 9000	2000	Quality management systems - Fundamentals and vocabulary	EN ISO 9000	2000
ISO 11014-1	1994	Safety data sheet for chemical products Part 1: Content and order of sections	-	-
ISO 14001	1996	Environmental management systems Specification with guidance for use	EN ISO 14001	1996

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61249-2-21

Première édition
First edition
2003-11

**Matériaux pour circuits imprimés
et autres structures d'interconnexion –**

Partie 2-21:

**Matériaux de base renforcés, plaqués et non
plaqués – Feuilles stratifiées renforcées en tissu
de verre de type E époxyde non halogéné,
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**Materials for printed boards and other
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Part 2-21:

**Reinforced base materials, clad and unclad –
Non-halogenated epoxide woven E-glass
reinforced laminated sheets of defined
flammability (vertical burning test), copper-clad**

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International Electrotechnical Commission
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CONTENTS

FOREWORD	7
1 Scope	13
2 Normative references	13
3 Materials and construction	13
3.1 Resin system	15
3.2 Reinforcement	15
3.3 Metal foil	15
4 Internal marking	15
5 Electrical properties	15
6 Non-electrical properties of the copper-clad laminate	17
6.1 Appearance of the copper-clad sheet	17
6.2 Appearance of the unclad face	19
6.3 Laminate thickness	19
6.4 Bow and twist	21
6.5 Properties related to the copper foil bond	21
6.6 Punching and machining	23
6.7 Dimensional stability	23
6.8 Sheet sizes	25
6.9 Cut panels	25
7 Non-electrical properties of the base material after complete removal of the copper foil	27
7.1 Appearance of the dielectric base material	27
7.2 Flexural strength	29
7.3 Flammability	29
7.4 Water absorption	31
7.5 Measling	31
7.6 Glass transition temperature and cure factor	31
8 Quality assurance	33
8.1 Quality system	33
8.2 Responsibility for inspection	33
8.3 Qualification inspection	33
8.4 Quality conformance inspection	33
8.5 Certificate of conformance	33
8.6 Safety data sheet	33
9 Packaging and marking	35
10 Ordering information	35
Annex A (informative) Engineering information	37
Annex B (informative) Common laminate constructions	41
Annex C (informative) Guideline for qualification and conformance inspection	45
Bibliography	47

Table 1 – Electrical properties requirements	15
Table 2 – Nominal thickness and tolerance of metal-clad laminate	19
Table 3 – Bow and twist.....	21
Table 4 – Pull-off and peel strength	23
Table 5 – Dimensional stability	25
Table 6 – Size tolerance for cut panels	25
Table 7 – Rectangularity of cut panels	27
Table 8 – Flexural strength	29
Table 9 – Flammability	29
Table 10 – Water absorption	31
Table 11 – Measling	31
Table 12 – Glass transition temperature and cure factor	31

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SIST EN 61249-2-21:2004

<https://standards.iteh.ai/catalog/standards/sist/01116594-e62c-4cf0-81dd-17994a8631e7/sist-en-61249-2-21-2004>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

Part 2-21: Reinforced base materials, clad and unclad – Non-halogenated epoxide woven E-glass reinforced laminated sheets of defined flammability (vertical burning test), copper-clad

FOREWORD

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International Standard IEC 61249-2-21 has been prepared by IEC technical committee 91: Electronics assembly technology.

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

FDIS	Report on voting
91/409/FDIS	91/425/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.

IEC 61249-2 consists of the following parts, under the general title *Materials for printed boards and other interconnecting structures – Part 2: Reinforced base materials, clad and unclad*:

- Part 2-1: Phenolic cellulose paper laminate, economic grade
- Part 2-2: Phenolic cellulose paper reinforced laminated sheets, high electrical grade, copper-clad
- Part 2-4: Polyester non-woven/woven fibreglass laminated sheet of defined flammability (vertical burning test), copper-clad
- Part 2-5: Brominated epoxide cellulose paper reinforced core/woven E-glass reinforced surfaces-laminated sheets of defined flammability (vertical burning test), copper-clad
- Part 2-6: Brominated epoxide non-woven/woven, E-glass reinforced laminated sheets of defined flammability (vertical burning test), copper-clad
- Part 2-7: Epoxide woven E-glass laminated sheet of defined flammability (vertical burning test), copper-clad
- Part 2-8: Modified brominated epoxide woven fibreglass reinforced laminated sheets of defined flammability (vertical burning test), copper clad
- Part 2-9: Bismaleimide/triazine, modified epoxide or unmodified, woven E-glass reinforced laminated sheets of defined flammability (vertical burning test), copper-clad
- Part 2-10: Cyanate ester, brominated epoxide, modified or unmodified, woven E-glass reinforced laminated sheets of defined flammability (vertical burning test), copper-clad
- Part 2-11: Polyimide, brominated epoxide, modified or unmodified, woven E-glass reinforced laminated sheets of defined flammability (vertical burning test), copper-clad
- Part 2-12: Epoxide non-woven aramid laminate of defined flammability, copper-clad
- Part 2-13: Cyanate ester non-woven aramid laminate of defined flammability, copper-clad
- Part 2-18: Polyester non-woven fibreglass reinforced laminated sheet of defined flammability (vertical burning test), copper-clad
- Part 2-19: Epoxide cross-ply linear fibreglass-reinforced laminated sheets of defined flammability (vertical burning test), copper-clad
- Part 2-21: Non-halogenated epoxide woven E-glass reinforced laminated sheets of defined flammability (vertical burning test), copper-clad
- Part 2-22: Modified non-halogenated epoxide woven E-glass laminated sheets of defined flammability (vertical burning test), copper-clad¹
- Part 2-23: Non-brominated phenolic, cellulose paper laminated sheets of defined flammability, economic grade¹
- Part 2-26: Non-brominated epoxide, non-woven/woven glass fabric sheet of defined flammability, copper-clad¹

¹ Under consideration.

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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