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Elektrostatiska urladdningar (ESD) – Del 6-1: Kontroll av statisk elektricitet i sjukhusmiljöer – Allmänna fordringar på anläggningar och system

*Electrostatics –
Part 6-1: Electrostatic control for healthcare –
General requirements for facilities*

Som svensk standard gäller europastandarden EN IEC 61340-6-1:2018. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61340-6-1:2018.

Nationellt förord

Europastandarden EN IEC 61340-6-1:2018

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61340-6-1, First edition, 2018 - Electrostatics - Part 6-1: Electrostatic control for healthcare - General requirements for facilities**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 17.220.99; 29.020.00; 11.020.99

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ICS 11.020.99; 17.220.99; 29.020

English Version

**Electrostatics - Part 6-1: Electrostatic control for healthcare -
General requirements for facilities
(IEC 61340-6-1:2018)**

Électrostatique - Partie 6-1: Contrôle électrostatique dans le
domaine de la santé - Exigences générales relatives aux
établissements
(IEC 61340-6-1:2018)

Elektrostatik - Teil 6-1: Überwachung der Elektrostatik im
Gesundheitswesen - Allgemeine Anforderungen für die
Infrastruktur
(IEC 61340-6-1:2018)

This European Standard was approved by CENELEC on 2018-10-29. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 101/566/FDIS, future edition 1 of IEC 61340-6-1, prepared by IEC/TC 101 "Electrostatics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61340-6-1:2018.

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) 2019-07-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-10-29

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

Endorsement notice

The text of the International Standard IEC 61340-6-1:2018 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60601-1	NOTE	Harmonized as EN 60601-1
IEC 61010-2-101	NOTE	Harmonized as EN 61010-2-101
IEC 60364 (series)	NOTE	Harmonized as HD 60364 (series)
IEC 61000-4-2	NOTE	Harmonized as EN 61000-4-2
IEC 60079-32-2	NOTE	Harmonized as EN 60079-32-2
IEC/TS 60079-32-1	NOTE	Harmonized as CLC/TR 60079-32-1

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60364-7-710	-	Electrical installations of buildings - Part 7-710: Requirements for special installations or locations - Medical locations	HD 60364-7-710	-
IEC/TR 61340-1	-	Electrostatics - Part 1: Electrostatic phenomena - Principles and measurements	-	-
IEC 61340-2-1	-	Electrostatics - Part 2-1: Measurement methods - Ability of materials and products to dissipate static electric charge	EN 61340-2-1	-
IEC 61340-2-3	-	Electrostatics - Part 2-3: Methods of test for determining the resistance and resistivity of solid materials used to avoid electrostatic charge accumulation	EN 61340-2-3	-
IEC 61340-4-1	-	Electrostatics - Part 4-1: Standard test methods for specific applications - Electrical resistance of floor coverings and installed floors	EN 61340-4-1	-
IEC/TS 61340-4-2	2013	Electrostatics - Part 4-2: Standard test methods for specific applications - Electrostatic properties of garments	-	-
IEC 61340-4-3	-	Electrostatics - Part 4-3: Standard test methods for specific applications - Footwear	EN IEC 61340-4-3	-
IEC 61340-4-5	-	Electrostatics - Part 4-5: Standard test methods for specific applications - Methods for characterizing the electrostatic protection of footwear and flooring in combination with a person	EN IEC 61340-4-5	-
IEC 61340-5-1	-	Electrostatics - Part 5-1: Protection of electronic devices from electrostatic phenomena - General requirements	EN 61340-5-1	-

EN IEC 61340-6-1:2018 (E)

ISO 18080-2	-	Textiles - Test methods for evaluating the electrostatic propensity of fabrics - Part 2: Test method using rotary mechanical friction	-
ISO 18080-3	-	Textiles - Test methods for evaluating the electrostatic propensity of fabrics - Part 3: Test method using manual friction	-
ISO 18080-4	-	Textiles - Test methods for evaluating the electrostatic propensity of fabrics - Part 4: Test method using horizontal mechanical friction	-
ISO 20344	-	Personal protective equipment - Test methods for footwear	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROSTATICS –

**Part 6-1: Electrostatic control for healthcare –
General requirements for facilities**

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.
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International Standard IEC 61340-6-1 has been prepared by IEC technical committee 101: Electrostatics.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
101/566/FDIS	101/570/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61340 series, published under the general title *Electrostatics*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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

INTRODUCTION

Static electricity can be the source of several hazards to patients, staff and equipment in healthcare facilities. Such hazards include:

- electromagnetic disturbance or electrostatic discharge (ESD) disruption or damage to medical instrumentation and data processing equipment;
- damage to ESD susceptible electronic components and assemblies during service and maintenance;
- electrostatic attraction (ESA) and contamination;
- ignition of flammable gases, liquids and other materials, and
- electrostatic shocks to people.

Adequate electrostatic control can eliminate these hazards, or at least reduce residual risk to tolerable levels.

ELECTROSTATICS –

Part 6-1: Electrostatic control for healthcare – General requirements for facilities

1 Scope

This part of IEC 61340 applies to facilities that provide healthcare including hospitals, care centres and clinics.

This document provides technical requirements and recommendations for controlling electrostatic phenomena in healthcare facilities, which includes requirements for equipment, materials, and products used to control static electricity.

The requirements of this document do not apply to medical electrical equipment specified in IEC 60601-1 [1]¹ and in vitro diagnostic (IVD) medical equipment specified in IEC 61010-2-101 [2].

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60364-7-710, *Electrical installations of buildings – Part 7-710: Requirements for special installations or locations – Medical locations*

IEC TR 61340-1, *Electrostatics – Part 1: Electrostatic phenomena – Principles and measurements*

IEC 61340-2-1, *Electrostatics – Part 2-1: Measurement methods – Ability of materials and products to dissipate static electric charge*

IEC 61340-2-3, *Electrostatics – Part 2-3: Methods of test for determining the resistance and resistivity of solid materials used to avoid electrostatic charge accumulation*

IEC 61340-4-1, *Electrostatics – Part 4-1: Standard test methods for specific applications – Electrical resistance of floor coverings and installed floors*

IEC TS 61340-4-2:2013, *Electrostatics – Part 4-2: Standard test methods for specific applications – Electrostatic properties of garments*

IEC 61340-4-3, *Electrostatics – Part 4-3: Standard test methods for specific applications – Footwear*

IEC 61340-4-5, *Electrostatics – Part 4-5: Standard test methods for specific applications – Methods for characterizing the electrostatic protection of footwear and flooring in combination with a person*

¹ Numbers in square brackets refer to the bibliography.

IEC 61340-5-1, *Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements*

ISO 18080-2, *Textiles – Test methods for evaluating the electrostatic propensity of fabrics – Part 2: Test method using rotary mechanical friction*

ISO 18080-3, *Textiles – Test methods for evaluating the electrostatic propensity of fabrics – Part 3: Test method using manual friction*

ISO 18080-4, *Textiles – Test methods for evaluating the electrostatic propensity of fabrics – Part 4: Test method using horizontal mechanical friction*

ISO 20344, *Personal protective equipment – Test methods for footwear*