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Electrostatics –
Part 6-1: ~~Electrostatic control for healthcare – General requirements for facilities~~ Electrostatic control in healthcare, commercial and public facilities – Healthcare

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ELECTROSTATICS –

Part 6-1: ~~Electrostatic control for healthcare – General requirements for facilities~~ Electrostatic control in healthcare, commercial and public facilities – Healthcare

FOREWORD

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In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough

red text. A separate Final version with all changes accepted is available in this publication.

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

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

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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~~ Electrostatic control in healthcare, commercial and public facilities – Healthcare

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*~~ *Low-voltage electrical installations – 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*

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1 Numbers in square brackets refer to the bibliography.

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*

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*

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