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Electrostatics –
Part 6-2: Electrostatic control in healthcare, commercial and public facilities – Public spaces and office areas

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CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 7
4 Static electricity 9
4.1 General 9
4.2 Triboelectrification 9
4.3 Retention of charge 9
4.4 Induction 9
4.5 Charge transfer by conduction 10
4.6 Electrostatic discharge (ESD) 10
5 Electrostatic hazards and nuisances 10
5.1 General 10
5.2 Electrostatic shocks to people 10
5.3 Electrostatic discharge and electromagnetic compatibility 10
5.4 Electrostatic attraction and repulsion 11
5.5 Ignition of flammable substances 11
6 Electrostatic control 11
6.1 General 11
6.2 Passive control methods 11
6.2.1 Material selections 11
6.2.2 Grounding or equipotential bonding 12
6.2.3 Passive ionization 12
6.3 Active control methods 12
6.3.1 Humidity 12
6.3.2 Active ionization 13
6.4 Design of facilities 13
6.4.1 Incorporating electrostatic control into building design 13
6.4.2 Responsibility for selecting and operating electrostatic control measures 13
6.4.3 Qualification and verification 14
6.5 Technical requirements and recommendations 14
6.5.1 Electrical safety 14
6.5.2 Material classification 14
6.5.3 Selection of materials for electrostatic control 16
Bibliography 18

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IEC TS 61340-6-2 has been prepared by IEC technical committee 101: Electrostatics. It is a Technical Specification.

The text of this Technical Specification is based on the following documents:

Draft	Report on voting
101/682/DTS	101/695/RVDTS

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Technical Specification is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 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

This document provides guidance on how to control static electricity in office areas and public places. Static electricity can be the source of the following hazards and nuisances:

- electrostatic shocks to people;
- electromagnetic interference (EMI) or electrostatic discharge (ESD) disruption or damage to electronic equipment, audiovisual systems, computers and mobile devices such as telephones, tablet computers, laptop computers;
- contamination caused by electrostatic attraction (ESA) or electrostatic repulsion (ESR) of airborne pathogens;
- ignition of flammable gases, vapours, liquids, aerosols, combustible flyings, powders and dusts.

Adequate electrostatic control can eliminate these hazards and nuisances, or at least reduce involved risk to tolerable levels. Electrostatic controls can be established in many different ways.

ELECTROSTATICS –

Part 6-2: Electrostatic control in healthcare, commercial and public facilities – Public spaces and office areas

1 Scope

This part of IEC 61340 applies to the interior design of public places, retail and office areas such as, but not limited to staircases, offices, meeting rooms, auditoriums, airports, train stations, shopping centres, restaurants and theatres. This document includes guidelines for architects, interior designers and facility managers.

Hazards, nuisances and other problems associated with electrostatic phenomena and the principles of their control are outlined. This document includes requirements and recommendations for materials, and products used to control static electricity.

The handling of electrostatic sensitive components is described in IEC 61340-5-1 [1][1] and the avoidance of hazards due to static electricity in explosive atmospheres is presented in IEC TS 60079-32-1 [2]. The requirements for electrostatic control in healthcare facilities are specified in IEC 61340-6-1 [3]. The guidance in this document is not intended to replace or supersede the requirements of the aforementioned standards and technical specification, but can be used in association with them to establish appropriate electrostatic control measures.

These guidelines do not replace or supersede any requirements for personnel safety specified in other standards or codes of practice.

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 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 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*

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

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[1] Numbers in square brackets refer to the Bibliography.

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*

EN 1149-3:2004, *Protective clothing – Electrostatic properties – Part 3: Test methods for measurement of charge decay*