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IEC 62561-2:2025

DRAFT TANZANIA STANDARD

(Draft for comments only)

Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes

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TANZANIA BUREAU OF STANDARDS

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1 National Foreword

This draft Tanzania Standard is being prepared by the Electrical Equipment Technical Committee, under the supervision of the Electrotechnical divisional standards committee (EDC)

This draft Tanzania Standard is an adoption of the International Standard **IEC 62561-2:2025** Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes, Which has been prepared by the International Electrotechnical Commission

2 Terminology and conventions

Some terminologies and certain conventions are not identical with those used in Tanzania standards; attention is drawn especially to the following: -

1) The comma has been used as a decimal marker for metric dimensions. In Tanzania Standards, it is current practice to use “full point” on the baseline as the decimal marker.

2) Where the words “International Standard(s)” appear, referring to this standard they should read “Tanzania Standard(s)”.

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CONTENTS

FOREWORD....4
INTRODUCTION....6
1 Scope....7
2 Normative references....7
3 Terms and definitions....7
4 Requirements....10
4.1 General....10
4.2 Documentation and installation instructions....10
4.3 Air-termination conductors, air-termination rods, catenary wires and down conductors....10
4.4 Earth electrodes....13
4.4.1 General....13
4.4.2 Earth conductors....15
4.4.3 Earth rods....15
4.4.4 Earth plates and equipotential earth grids....15
4.4.5 Couplers for earth rods....15
4.5 Earth lead-in conductors....16
4.6 Marking....16
4.6.1 Content of marking....16
4.6.2 Durability and legibility....17
5 Tests....17
5.1 General test conditions....17
5.2 Air-termination conductors, air-termination rods, catenary wires, down conductors, earth lead-in conductors, earth conductors, earth plates and equipotential earth grids....17
5.2.1 General....17
5.2.2 Test for thickness of coating....18
5.2.3 Resistance test for coated conductors....20
5.2.4 Bending test for coated conductors....20
5.2.5 Environmental test for coated conductors....20
5.2.6 Electrical resistivity test....21
5.2.7 Tensile strength test....22
5.2.8 Material, configuration and cross-sectional area test....22
5.3 Earth rods....22
5.3.1 General....22
5.3.2 Test for thickness of coating on earth rods....22
5.3.3 Adhesion test for copper coated earth rods....22
5.3.4 Electrical resistance test for coated earth rods....23
5.3.5 Bending test for copper coated steel earth rods....24
5.3.6 Environmental test for coated earth rods....24
5.3.7 Electrical resistivity test for earth rods....24
5.3.8 Tensile strength test for earth rods....25
5.3.9 Test for yield/tensile ratio for copper coated steel earth rods....25
5.3.10 Material, configuration and cross-sectional area test for earth rods....26
5.4 Couplers for earth rods....26
5.4.1 General....26

Draft for stakeholders' comments only

5.4.2 Compression test by mechanical means 26
5.4.3 Environmental test 28
5.4.4 Lightning current test 28
5.4.5 Tensile strength test for couplers of earth rods 28
5.5 Marking test 29
5.5.1 General test conditions 29
5.5.2 Acceptance criteria 29
5.6 Documentation and installation instructions 29
5.6.1 General test conditions 29
5.6.2 Acceptance criteria 29
6 Electromagnetic compatibility (EMC) 29
7 Structure and content of the test report 29
7.1 General 29
7.2 Report identification 30
7.3 Specimen description 30
7.4 Conductor 30
7.5 Standards and references 30
7.6 Test procedure 30
7.7 Testing equipment description 30
7.8 Measuring instruments description 31
7.9 Results and parameters recorded 31
7.10 Statement of pass or fail 31
Annex A (normative) Environmental test 32
A.1 General 32
A.2 Salt mist treatment 32
A.3 Humid sulphurous atmosphere treatment 32
A.4 Ammonia atmosphere treatment 32
Annex B (normative) Lightning current test 33
B.1 General 33
B.2 Acceptance criteria 33
Annex C (normative) Requirements and tests for air-termination conductors, air-termination rods, catenary wires and down conductors 34
Annex D (normative) Requirements and tests for earth lead-in conductors, earth electrodes, equipotential earth grids and couplers for earth rods 35
Annex E (normative) Sequence of tests for air-termination conductors, air-termination rods, catenary wires, earth lead-in conductors, down-conductors, earth conductors, earth plates and equipotential earth grids 36
Annex F (normative) Sequence of tests for earth rods 38
Annex G (normative) Sequence of tests of couplers for earth rods 39
Annex H (normative) Material, configuration and cross-sectional area test 40
H.1 General 40
H.2 Acceptance criteria for air-termination conductors, air-termination rods, catenary wires and down conductors 40
H.3 Acceptance criteria for earth lead-in conductors, earth electrodes, equipotential earth grids 40
Annex I (normative) Applicability of previous tests 41
Bibliography 42

Draft for Stakeholders' comments only

Figure 1 – Coating measurements around the circumference of a round conductor 18
Figure 2 – Coating measurements of a plate conductor 18
Figure 3 – Typical test arrangement for adhesion test 23
Figure 4 – Definitions of upper yield strength R_{eH} and tensile strength R_m 25
Figure 5 – Typical test arrangement for the compression test by mechanical means 27
Figure E.1 – Flow chart of tests for air-termination conductors, air-termination rods, catenary wires, earth lead-in conductors, down-conductors, earth electrodes and equipotential earth grids 37
Figure F.1 – Flow chart of tests for earth rods 38
Figure G.1 – Flow chart of tests of couplers for earth rods 39

Table 1 – Material, configuration and cross-sectional area of air-termination conductors, air-termination rods, catenary wires and down-conductors 11
Table 2 – Material properties 12
Table 3 – Material, configuration and cross-sectional area of earth lead-in conductors, earth electrodes and equipotential earth grids 13
Table B.1 – Lightning impulse current (I_{imp}) parameters 33
Table C.1 – Summary of requirements and tests for various elements tested according to Table 1 and Table 2 34
Table D.1 – Summary of requirements and tests for various elements tested according to Table 2 and Table 3 35
Table I.1 – Differences in the requirements for conductors and earth electrodes complying with IEC 62561-2:2012 or IEC 62561-2:2018 41

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes

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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IEC 62561-2 has been prepared by IEC technical committee 81: Lightning protection. It is an International Standard.

This third edition cancels and replaces the second edition published in 2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) definitions of new conductor types mentioned in this document have been added;
b) the document has been updated in line with IEC 60068-2-52:2017 on salt mist treatment;
c) the document has been updated in line with ISO 22479:2019 on humid sulphurous atmosphere treatment;
d) a new normative Annex H for material, configuration and cross-sectional area test has been introduced;

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e) a new normative Annex I for applicability of previous tests has been introduced.

f) equipotential earth grid has been introduced.

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

Draft	Report on voting
81/794/FDIS	81/800/RVD

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 International Standard 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 62561 series, published under the general title *Lightning protection system components (LPSC),* 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, or

– revised.

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INTRODUCTION

This part of IEC 62561 deals with the requirements and tests for lightning protection system components (LPSC), specifically conductors and earth electrodes, used for the installation of a lightning protection system (LPS) designed and implemented according to the IEC 62305 series.

Scope

This part of IEC 62561 specifies the requirements and tests for

– metallic conductors (other than "natural" conductors) that form part of the air-termination and down-conductor systems, and

– metallic earth electrodes that form part of the earth-termination system.

NOTE 1 Additional requirements can be necessary for conductors and earth electrodes intended for use in hazardous environments.

NOTE 2 In CENELEC member countries, testing requirements of components for explosive atmospheres are specified in CLC/TS 50703-2.

1 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 60068-2-52:2017, *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium, chloride solution*)

IEC 60228, *Conductors of insulated cables*

ISO 2178, *Non-magnetic coatings on magnetic substrates – Measurement of coating thickness – Magnetic method*

ISO 1460, *Metallic coatings – Hot dip galvanized coatings on ferrous materials – Gravimetric determination of the mass per unit area*

ISO 1461:2022, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*

ISO 6892-1, *Metallic materials – Tensile testing – Part 1: Method of test at room temperature*

ISO 6957:1988, *Copper alloys – Ammonia test for stress corrosion resistance*

ISO 22479:2019, *Corrosion of metals and alloys – Sulphur dioxide test in a humid atmosphere (fixed gas method)*

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