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(ISO 12944-3:2017)
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**PAINTS AND VARNISHES - CORROSION
PROTECTION OF STEEL STRUCTURES BY
PROTECTIVE PAINT SYSTEMS -
PART 3: DESIGN CONSIDERATIONS**
(First Revision)

SRI LANKA STANDARDS INSTITUTION

Sri Lanka Standard
PAINTS AND VARNISHES - CORROSION PROTECTION OF STEEL
STRUCTURES BY PROTECTIVE PAINT SYSTEMS -
PART 3: DESIGN CONSIDERATIONS
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SRI LANKA STANDARDS INSTITUTION
No. 17, Victoria Place,
Elvitigala Mawatha,
Colombo 08.
SRI LANKA

Sri Lanka Standard
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NATIONAL FOREWORD

This draft standard was approved by the Sectoral Committee on Building and Construction Materials and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standard Institution on 2021-07-29

This Sri Lanka Standard is identical with **ISO 12944-3:2017** published by the International Organization for Standardization (**ISO**).

The standard deals with the basic criteria for the design of steel structures to be coated by protective paint systems in order to avoid premature corrosion and degradation of the coating or the structure.

TERMINOLOGY AND CONVENTIONS

The text of the International Standard has been accepted as suitable for publication as a Sri Lanka Standard. However, certain terminology and conventions are not identical with those used in Sri Lanka Standards.

Attention is therefore drawn to the following:

- a) Wherever the “International Standard” appear referring to this standard they should be interpreted as “Sri Lanka Standard”.
- b) Wherever page numbers are quoted, they are “**ISO**” page numbers.
- c) The coma has been used throughout as a decimal marker. In Sri Lanka Standards it is the current practice to use a full point on the base line as the decimal marker.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test method or observation shall be rounded off in accordance with **SLS 102**. The number of significant places retained in the rounded off value shall be the same as that of the specified value in this standard.

CROSS-REFERENCES

International standard

ISO 1461: Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods

ISO 12944-1: Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Part 1: General introduction

Corresponding Sri Lanka Standard

SLS ISO 1461: Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods

SLS ISO 12944-1: Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Part 1: General introduction

INTERNATIONAL
STANDARD

ISO
12944-3

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**Paints and varnishes — Corrosion
protection of steel structures by
protective paint systems —**

**Part 3:
Design considerations**

*Peintures et vernis — Anticorrosion des structures en acier par
systèmes de peinture —*

Partie 3: Conception et dispositions constructives



Reference number
ISO 12944-3:2017(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 14, *Protective paint systems for steel structures*.

This second edition cancels and replaces the first edition (ISO 12944-3:1998), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the terms and definitions which were not used in the main part of the standard have been deleted;
- the normative references have been updated;
- [5.1](#) "General" has been added;
- the requirement for gap sealing material has been added in [5.3](#);
- the requirements for surface preparation in case of high and very high durabilities for C4 and higher, as well as Im1 to Im4, have been added;
- the title of [Table A.1](#) has been corrected;
- a key has been added to [Figure B.1](#);
- [Figure D.1](#) c) has been deleted;
- the requirements for the radius in [Figures D.5](#) and [D.7](#) have been added;
- a bibliography has been added;
- the text has been editorially revised.

A list of all parts in the ISO 12944 series can be found on the ISO website.