INTERNATIONAL STANDARD

ISO 3864-4

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Graphical symbols — Safety colours and safety signs —

Part 4: Colorimetric and photometric properties of safety sign materials

Symboles graphiques — Couleurs de sécurité et signaux de sécurité —

Partie 4: Propriétés colorimétriques et photométriques des matériaux des signaux de sécurité

Reference number
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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

ISO 3864-4 was prepared by Technical Committee ISO/TC 145, *Graphical symbols*, Subcommittee SC 2, *Safety identification, signs, shapes, symbols and colours*.

This part of ISO 3864, together with ISO 3864-1:—, cancels and replaces ISO 3864-1:2002, which has been technically revised.

ISO 3864 consists of the following parts, under the general title *Graphical symbols — Safety colours and safety signs*:

— *Part 1: Design principles for safety signs and safety markings*

— *Part 2: Design principles for product safety labels*

— *Part 3: Design principles for graphical symbols for use in safety signs*

— *Part 4: Colorimetric and photometric properties of safety sign materials*

Introduction

This part of ISO 3864 has been prepared to provide manufacturers/suppliers of safety signs and test laboratories and instrument manufacturers with specifications of the colorimetric and photometric properties of safety signs comprising different types of material and with test methods.

Consistent use of this part of ISO 3864 will assist in improving knowledge of safety-sign requirements and in furthering understanding of the performance of various types of safety signs in everyday use.

This part of ISO 3864 is intended to be used by all Technical Committees within ISO charged with developing specific safety signing for their industry, to ensure that there is only one set of colorimetric and photometric requirements and test methods for safety signs.

Note that some countries' statutory regulations may differ in some respect from those given in this part of ISO 3864.

Graphical symbols — Safety colours and safety signs —

Part 4: Colorimetric and photometric properties of safety sign materials

IMPORTANT — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.

1 Scope

This part of ISO 3864 establishes the colorimetric and photometric requirements and test methods for the colours of safety signs to be used in workplaces and public areas. It provides the colorimetric and photometric specifications for the named safety and contrast colours prescribed in ISO 3864-1.

The physical requirements that safety signs have to meet are primarily related to daytime colour and normally lit environments. This part of ISO 3864 also includes the colorimetric requirements and test methods for safety signs and phosphorescent material which also operate in unlit environments.

This part of ISO 3864 is applicable to all locations where safety issues related to people need to be addressed. However, it is not applicable to signalling used for guiding rail, road, river, maritime and air traffic and, generally speaking, to those sectors subject to a regulation that may differ.

The colorimetric and photometric properties of retroreflective safety signs, retroreflective materials combined with fluorescent or phosphorescent materials, or luminous safety signs activated by a radioactive source are not specified in this part of ISO 3864.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 3864-1: —[1)], *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 17724:2003, *Graphical symbols — Vocabulary*

CIE 15, *Colorimetry*

CIE 69, *Methods of characterizing illuminance meters and luminance meters: Performance, characteristics and specifications*

1) To be published. (Revision of ISO 3864-1:2002)