MAURITIAN STANDARD

**MS ISO 16069:2017**

Second edition
2018-01-06

# Graphical symbols — Safety signs — Safety way guidance systems (SWGS)



**ICS 01.080.20; 01.080.10**


**Mauritius Standards Bureau**

**Moka**

## National foreword

This Mauritian Standard is identical with the International Standard **ISO 16069:2017,** *Graphical symbols — Safety signs — Safety way guidance systems (SWGS)*. It was adopted by the Mauritius Standards Bureau on the recommendation of the **Mechanical Engineering Standards Committee** through its Subcommittee on **Graphical Symbols** and approved by the **Standards Council** on **06 December 2017**. It was notified in the Government Gazette on **06 January 2018** *.

For the purpose of this standard the following change should be made:

the words 'International Standard' should be replaced by 'Mauritian Standard'

The following Mauritian Standards are identical to the International Standards, which are referenced in the adopted standard:

| International Standard | Corresponding Mauritian Standard |
|---|---|
| **ISO 3864-1:2002**, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs in workplaces and public areas* | **MS ISO 3864-1:2002**, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs in workplaces and public areas* |
| **ISO 3864-3:2012,** *Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs* | **MS ISO 3864-3:2012**, *Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs* |
| **ISO 3864-4:2011**, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials* | **MS ISO 3864-4:2011**, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials* |
| **ISO 23601**, *Safety identification - Escape and evacuation plan signs* | **MS ISO 23601**, *Safety identification - Escape and evacuation plan signs* |

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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 145, *Graphical symbols*, Subcommittee SC 2, *Safety identifications, signs, shapes, symbols, and colours*.

This second edition cancels and replaces the first edition (ISO 16069:2004) which has been technically revised.

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

a) the component luminance requirements of the electrical systems have been updated;

b) the component luminance and dimensions of non-electrical phosphorescent systems have been updated;

c) the document and its requirements have been simplified to improve ease of use and eliminate ambiguity;

d) all example figures which by definition could not cover all arrangements have been removed;

e) an informative annex for designers of non-electrical phosphorescent systems regarding observation distances has been added.

# Introduction

Safety way guidance systems need to be standardized so that they communicate the information necessary to allow people to be able to evacuate a building efficiently and, if necessary, to assemble in designated safe areas in cases of fire or other emergencies.

Through the consistent and uniform international application of common SWGS design principles, persons in all countries will be better able to recognize and follow the directional information provided by such systems to assist in providing a safe evacuation. As an additional benefit, a standardized SWGS will assist fire fighters and other rescue teams to evacuate occupied areas during emergency situations.

In order to communicate safety way guidance information efficiently across language barriers, the systems defined in this document incorporate the use of graphical symbols and markings such as arrows, conforming to ISO 7010 and ISO 3864-3.

Illumination of escape routes is not part of the SWGS and is therefore not covered by this document; a SWGS is not intended to replace emergency escape lighting. There will be certain situations where emergency escape lighting is not needed, and other situations, for example where smoke is present, where emergency escape lighting can lose its efficiency and a SWGS will be more effective in assisting emergency evacuation, but it is generally recommended that SWGS be used in combination with the illumination of escape routes to provide additional benefits for the whole system.

The principles given in this document are intended to provide consistent design elements irrespective of whether they use electrically powered or phosphorescent components. Consistent use will improve public awareness of the systems and assist rapid recognition and effectiveness in the case of an emergency.

# Graphical symbols — Safety signs — Safety way guidance systems (SWGS)

**IMPORTANT — The colours represented in the electronic file of this document can be neither viewed on screen nor printed as true representations. For the purposes of colour matching, see ISO 3864-4 which provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.**

## 1 Scope

This document describes the principles governing the design and application of visual components used to create a safety way guidance system (SWGS).

This document contains general principles valid both for electrically powered and for phosphorescent components. Special information which is related to the type of component is given to assist in defining the environment of use, choice of material, layout, installation and maintenance of SWGS.

This document does not cover risk assessment. Applications with different risks to the occupants typically require different layouts and types of SWGS. The specific application and exact final design of SWGS is entrusted to those persons responsible for this task.

This document also does not include the special considerations of possible tactile or audible components of SWGS, nor does it include requirements for high mounted components of the emergency escape route lighting, especially the design and application of emergency escape route lighting.

This document is intended, by collaboration and coordination, to be used by all other Technical Committees within ISO and IEC charged with developing SWGS for their specific requirements. This document is not to be used for ships falling under regulations of the International Maritime Organization (IMO).

## 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.

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

ISO 3864-3, *Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs*

ISO 3864-4:2011, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials*

ISO 7010:2011, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

ISO 23601, *Safety identification — Escape and evacuation plan signs*

IEC 60364-5-56, *Low-Voltage electrical Installations — Part 5-56: Selection and erection of electrical equipment — Safety services*

IEC 60598-2-22, *Luminaires — Part 2-22: Particular requirements — Luminaires for emergency lighting*