ISO 3864-1:2011 establishes the safety identification colours and design principles for safety signs and safety markings to be used in workplaces and in public areas for the purpose of accident prevention, fire protection, health hazard information and emergency evacuation. It also establishes the basic principles to be applied when developing standards containing safety signs.

ISO 3864-1:2011 is applicable to all locations where safety issues related to people need to be addressed. However, it is not applicable to the signalling used for guiding rail, road, river, maritime and air traffic and, generally speaking, to those sectors subject to a regulation which may differ.

ISO 3864-1 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 3864-4, 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

There is a need to standardize a system of giving safety information that relies as little as possible on the use of words to achieve understanding.
Continued growth in international trade, travel and mobility of labour requires a common method of communicating safety information.
Lack of standardization may lead to confusion and the risk of accidents.
The use of standardized safety signs does not replace proper work methods, instructions and accident prevention training or measures. Education is an essential part of any system that provides safety information.

NOTE Information on procedures, criteria of acceptability, safety sign templates and application of safety signs are given on the website: http://www.iso.org/tc145/sc2.

IMPORTANT — **The colours represented in the electronic file of this part of ISO 3864 can be neither viewed on screen nor printed as true representations. Although the copies of this part of ISO 3864 printed by ISO have been produced to correspond (with an acceptable tolerance as judged by the naked eye) to the colour requirements, it is not intended that these printed copies be used for colour matching. Instead, consult ISO 3864-4 which provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.**

1 Scope

This part of ISO 3864 establishes the safety identification colours and design principles for safety signs and safety markings to be used in workplaces and in public areas for the purpose of accident prevention, fire protection, health hazard information and emergency evacuation. It also establishes the basic principles to be applied when developing standards containing safety signs.
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 the signalling used for guiding rail, road, river, maritime and air traffic and, generally speaking, to those sectors subject to a regulation which may differ.

NOTE Some countries' statutory regulations might differ in some respect from those given 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 3864-3, *Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs*
- ISO 3864-4, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials*
- ISO 17724:2003, *Graphical symbols — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17724 and the following apply.

3.1
combination sign
sign that combines a safety sign and one or more associated supplementary signs on the same rectangular carrier

3.2
factor of distance
Z
relationship between the height (h) of a sign and the observation distance (l), used to determine observation distances of signs
$z = l/h$
[SOURCE: ISO 17724:2003, 28]

3.3
fire equipment sign
safety sign that indicates the location or identification of fire equipment

3.4
identifiability
property of a graphical symbol which enables its elements to be perceived as the objects or shapes depicted
[SOURCE: ISO 9186-2:2008, 3.1]

3.5
mandatory action sign
safety sign that indicates that a specific course of action is to be taken

3.6
multiple sign
sign that combines two or more safety signs and associated supplementary signs on the same rectangular carrier

3.7
prohibition sign
safety sign that indicates that a specific behaviour is forbidden

3.8
safe condition sign
safety sign that indicates an evacuation route, the location of safety equipment or a safety facility, or a safety action

3.9
safe observation distance
distance a person can be from a safety sign while still able to identify the safety sign and have the opportunity to follow the message
Note 1 to entry: Adapted from ISO 3864-2.

3.10
safety colour

colour with special properties to which a safety meaning is attributed

3.11

safety marking

marking which adopts the use of safety colours and safety contrast colours to convey a safety message or render an object or location conspicuous

3.12

safety sign

sign which gives a general safety message, obtained by a combination of a colour and geometric shape and which, by the addition of a graphical symbol, gives a particular safety message

3.13

sign height

diameter of a circular geometric shape or height of a rectangular or triangular geometric shape

3.14

supplementary sign

sign that is supportive of a safety sign and the main purpose of which is to provide additional clarification

3.15

visual acuity

capacity for seeing distinctly fine details that have a very small angular separation
[SOURCE: ISO 17724:2003, 82]

3.16

warning sign

safety sign that indicates a specific source of potential harm