# INTERNATIONAL STANDARD

ISO 7010

Third edition 2019-07

# Graphical symbols — Safety colours and safety signs — Registered safety signs

Symboles graphiques — Couleurs de sécurité et signaux de sécurité — Signaux de sécurité enregistrés





#### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Con	tent	Page Page
Forev	vord	iv
Intro	ductio	onvi
1	Scop	)e1
2	Norr	native references 1
3	Tern	ns and definitions1
4	Refe 4.1 4.2 4.3	rents and categorization of safety signs 2 General 2 Referent (safety meaning) 2 Categorization of safety signs 8
5	Regi	stered safety signs9
Biblio	ograpl	ıy298

#### **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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

For an explanation of 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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

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

This third edition cancels and replaces the second edition (ISO 7010:2011). The following changes have been made with respect to the previous edition:

#### The safety signs from

- ISO 7010:2011/Amd 1:2012,
- ISO 7010:2011/Amd 2:2012,
- ISO 7010:2011/Amd 3:2012.
- ISO 7010:2011/Amd 4:2013,
- ISO 7010:2011/Amd 5:2014,
- ISO 7010:2011/Amd 6:2014,
- ISO 7010:2011/Amd 7:2016,
- ISO 7010:2011/Amd 8:2017,
- ISO 7010:2011/Amd 9:2018,
- ISO 7010:2011/DAmd 240:2018,
- ISO 7010:2011/DAmd 241:2018,
- ISO 7010:2011/DAmd 242:2018 and
- ISO 20712-1:2008

have been incorporated with a few minor text adjustments.

This edition also cancels and replaces ISO 20712-1:2008.

All safety signs are available on the ISO Online browsing platform at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

#### Introduction

There is a need to standardize a system of providing 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.

The safety signs are intended for use only where there is a risk to people. They may appear in safety signage in workplaces and public areas, safety manuals and notices, product labelling and escape and evacuation plans, as appropriate.

This document 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 safety sign for each safety meaning. It is also intended that this document be revised regularly to include safety signs as they are standardized by ISO, and which conform to the design principles given in the ISO 3864 series.

The safety signs in this document have been validated by ISO/TC 145/SC 2 according to procedures of standardization current at the time of publication.

NOTE 1 Some countries' statutory regulations might differ in some respects from those given in this document.

NOTE 2 Information on procedures, criteria of acceptability, safety sign templates and application of safety signs, as well as translations of the referents, can be found at <a href="http://www.iso.org/tc145/sc2">http://www.iso.org/tc145/sc2</a>.

# Graphical symbols — Safety colours and safety signs — Registered safety signs

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 prescribes safety signs for the purposes of accident prevention, fire protection, health hazard information and emergency evacuation.

The shape and colour of each safety sign are according to ISO 3864-1 and the design of the graphical symbols is according to ISO 3864-3.

This document 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, in general, to those sectors subject to a regulation which may differ with regard to certain points of this document and of the ISO 3864 series.

This document specifies the safety sign originals that can be scaled for reproduction and application purposes.

#### 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

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

#### image content

written description of the elements of a graphical symbol or safety sign and their relative disposition

#### 3.2

#### referent

idea or object that a graphical symbol is intended to represent

#### 3.3

#### safety sign

sign giving 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

#### 3.4

#### safety sign original

safety sign with which a referent, a graphical representation and a description of the application are associated

#### 3.5

#### supplementary sign

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

## 4 Referents and categorization of safety signs

#### 4.1 General

The summaries in 4.2 and 4.3 are provided to facilitate the search for registered safety signs.

This document will be maintained electronically through the use of a database. The indexes of this database will be used in these summaries as search engines with each registered safety sign having a unique reference number.

#### 4.2 Referent (safety meaning)

<u>Table 1</u> gives the list of referents in alphabetical order and provides the safety sign functional reference number.

Table 1 — Summary of referents in alphabetical order

Referent (safety meaning)	Functional reference number
Alighting from toboggan to the left	M050
Alighting from toboggan to the right	M051
Arc flash; warning	W042
Asphyxiating atmosphere; warning	W041
Automated external heart defibrillator	E010
Automatic start-up; warning	W018
Barbed wire; warning	W033
Battery charging; warning	W026
Biological hazard; warning	W009
Boating area; warning	W058
Break to obtain access	E008
Bull; warning	W034
Check guard	M027
Child seat presence and orientation detection system (CPOD)	E014
Child's lifejacket	E045
Close and secure hatches in launch sequence	M037
Close safety bar of chairlift	M033
Connect an earth terminal to the ground	M005
Corrosive substance; warning	W023

 Table 1 (continued)

Referent (safety meaning)	Functional reference number
Counterrotating rollers; warning	W025
Crocodiles, alligators or caymans; warning	W067
Crushing; warning	W019
Crushing of hands; warning	W024
Davit-launched liferaft	E039
Deep shelving beach; warning	W066
Deep water; warning	W047
Disconnect before carrying out maintenance or repair	M021
Disconnect mains plug from electrical outlet	M006
Doctor	E009
Do not alter the state of the switch	P031
Do not expose to direct sunlight or hot surface	P068
Do not extinguish with water	P011
Do not leave the tow-track	P037
Do not obstruct	P023
Do not put finger into the nozzle of a hydromassage	P070
Do not ram into toboggans	P047
Do not set off fireworks	P040
Do not spray with water	P016
Do not stretch out of toboggan	P046
Do not swing the chair	P038
Do not tie knots in rope	P030
Do not touch	P010
Do not use for face grinding	P032
Do not use for wet grinding	P033
Do not use lift in the event of fire	P020
Do not use this device in a bathtub, shower or water-filled reservoir	P026
Do not use this incomplete scaffold	P025
Do not use this lift for people	P027
Do not use with hand-held grinding machine	P034
Do not walk or stand here	P024
Do not wear gloves	P028
Do not wear metal-studded footwear	P035
Door opens by pulling on the left-hand side	E057
Door opens by pulling on the right-hand side	E058
Door opens by pushing on the left-hand side	E022
Door opens by pushing on the right-hand side	E023
Door slides left to open	E034
Door slides right to open	E033
Drinking water	E015
Drop (fall); warning	W008
Electricity; warning	W012
Embarkation ladder	E053
Emergency escape breathing device	E029

 Table 1 (continued)

Referent (safety meaning)	Functional reference number
Emergency exit (left hand)	E001
Emergency exit (right hand)	E002
Emergency exit for people unable to walk or with walking impairment (left)	E026
Emergency exit for people unable to walk or with walking impairment (right)	E030
Emergency hammer	E025
Emergency position indicating radio beacon	E052
Emergency stop button	E020
Emergency telephone	E004
Emergency window with escape ladder	E016
Escape ladder	E059
Evacuation assembly point	E007
Evacuation chair	E060
Evacuation temporary refuge	E024
Explosive material; warning	W002
Eyewash station	E011
Falling ice; warning	W039
Falling objects; warning	W035
Fire alarm call point	F005
Fire blanket	F016
Fire emergency telephone	F006
Fire extinguisher	F001
Firefighting equipment, collection of	F004
Fire hose reel	F002
Fire monitor	F015
Fire ladder	F003
Fire protection door	F007
First aid	E003
Fixed fire extinguishing battery	F008
Fixed fire extinguishing bottle	F013
Fixed fire extinguishing installation	F012
Flammable material; warning	W021
Floor-level obstacle; warning	W007
Forklift trucks and other industrial vehicles; warning	W014
Fragile roof; warning	W036
General mandatory action sign	M001
General prohibition sign	P001
General warning sign	W001
Guard dog; warning	W013
Hand crushing between press brake and material; warning	W031
Hand crushing between press brake tool; warning	W030
High surf or large breaking waves; warning	W065
Hot surface; warning	W017

 Table 1 (continued)

Referent (safety meaning)	Functional reference number
Hot works prohibited	P039
Immediately leave the tow-track in the event of falling	M035
Incoming tides; warning	W060
Infant's lifejacket	E046
Keep children under supervision in the aquatic environment	M054
Keep distance between toboggans	M052
Keep locked	M028
Kite surfing; warning	W062
Laser beam; warning	W004
Lifeboat	E036
Lifebuoy	E040
Lifebuoy with light	E042
Lifebuoy with line	E041
Lifebuoy with line and light	E043
Lifejacket	E044
Liferaft	E038
Liferaft knife	E035
Lift ski tips	M036
Line-throwing appliance	E050
Low temperature/freezing conditions; warning	W010
Lower lifeboat to the water in launch sequence	M039
Lower liferaft to the water in launch sequence	M040
Lower rescue boat to the water in launch sequence	M041
Magnetic field; warning	W006
Marine evacuation chute	E055
Marine evacuation slide	E054
Medical grab bag	E027
No access for forklift trucks and other industrial vehicles	P006
No access for people with active implanted cardiac devices	P007
No access for people with metallic implants	P014
No activated mobile phones	P013
No body boarding	P063
No children allowed	P036
No climbing	P009
No diving	P052
No dogs	P021
No eating or drinking	P022
No heavy load	P012
No jumping into water	P061
No kite surfing	P065
No leaning against	P041
No manually powered craft	P055
No mechanically powered craft	P056
No metallic articles or watches	P008

 Table 1 (continued)

Referent (safety meaning)	Functional reference number
No open flame; Fire, open ignition source and smoking prohibited	P003
No outdoor footwear	P060
No parasailing	P066
No personal water craft	P057
No photography	P029
No pushing	P017
No pushing into water	P062
No reaching in	P015
No running	P048
No sailing	P053
No sand yachting	P067
No sitting	P018
No smoking	P002
No snorkelling	P050
No stepping on surface	P019
No sub-aqua diving	P051
No surf craft	P059
No surfing between the red-and-yellow flags	P064
No swimming	P049
No thoroughfare	P004
No towed water activity	P058
No windsurfing	P054
Non-ionizing radiation; warning	W005
Not drinking water	P005
Not for people in the state of intoxication	P043
Not for pregnant women	P042
Not to be serviced by users	P069
Opaque eye protection must be worn	M007
Open safety bar of chairlift	M034
Optical radiation; warning	W027
Overhead load; warning	W015
Overhead obstacle; warning	W020
Oxidizing substance; warning	W028
Oxygen resuscitator	E028
Parasailing; warning	W063
Portable foam applicator unit	F010
Pressurized cylinder; warning	W029
Protect infant's eyes with opaque eye protection	M025
Protection shelter	E021
Quicksand or mud/deep mud or silt; warning	W061
Radioactive material or ionizing radiation; warning	W003
Rapid movement of workpiece in press brake; warning	W032
Refer to instruction manual/booklet	M002
Remote release station	F014

 Table 1 (continued)

Referent (safety meaning)	Functional reference number
Release falls in launch sequence	M042
Release lifeboat gripes in launch sequence	M045
Rescue boat	E037
Rescue window	E017
Rocket parachute flare	E049
Roof avalanche; warning	W040
Run over by remote operator-controlled machine; warning	W037
Safety shower	E012
Sand yachting; warning	W059
Search and rescue transponder	E047
Secure gas cylinders	M046
Sewage effluent outfall; warning	W055
Shallow water (diving); warning	W048
Sharks; warning	W054
Sharp element; warning	W022
Shipboard assembly station	E032
Shipboard general alarm	E031
Slippery surface; warning	W011
Slipway; warning	W044
Sound horn	M029
Start air supply in launch sequence	M044
Start engine in launch sequence	M038
Start water spray in launch sequence	M043
Stretcher	E013
Strong currents; warning	W057
Strong winds; warning	W064
Submerged objects; warning	W049
Sudden drop in swimming or leisure pools; warning	W050
Sudden loud noise; warning	W038
Surf craft area; warning	W046
Survival clothing	E056
Survival craft distress signals	E048
Thin ice; warning	W043
Towed water activity area; warning	W045
Toxic material; warning	W016
Tsunami evacuation area	E062
Tsunami evacuation building	E063
Tsunami hazard zone; warning	W056
Turn anticlockwise to open	E018
Turn clockwise to open	E019
Two-way VHF radiotelephone apparatus	E051
Unprotected edges; warning	W051
Unstable cliff; warning	W053
Unstable cliff edge; warning	W052

Table 1 (continued)

Referent (safety meaning)	Functional reference number
Use barrier cream	M022
Use footbridge	M023
Use gas detector	M048
Use handrail	M012
Use litter bin	M030
Use of smart glasses prohibited	P044
Use protective apron	M026
Use self-contained breathing appliance	M047
Use table saw adjustable guard	M031
Use this walkway	M024
Wash your hands	M011
Water fog applicator	F011
Water life-saving equipment	E061
Wear anti-static footwear	M032
Wear ear protection	M003
Wear eye protection	M004
Wear a face shield	M013
Wear head protection	M014
Wear high-visibility clothing	M015
Wear a mask	M016
Wear personal flotation devices	M053
Wear protective clothing	M010
Wear protective gloves	M009
Wear protective roller sport equipment	M049
Wear respiratory protection	M017
Wear safety belts	M020
Wear safety footwear	M008
Wear a safety harness	M018
Wear a welding mask	M019
Wheeled fire extinguisher	F009

## 4.3 Categorization of safety signs

Safety signs are categorized according to their function as follows:

- E is the category for signs indicating an evacuation route, the location of safety equipment or a safety facility, or a safety action (safe condition signs);
- F is the category for fire equipment signs;
- M is the category for mandatory action signs;
- P is the category for prohibition signs;
- W is the category for warning signs.

 $\underline{\text{Table 2}}$  summarizes the registered safety signs in terms of safety sign category in accordance with ISO 3864-1.

### 5 Registered safety signs

Tables 3 to 7 give safety sign originals in a uniform 70 mm size with corner marks to enable accurate enlargement and reduction scaling. The sign illustrations are shown without borders in order to allow for consistent reproduction scaling, though a border can be useful to achieve a luminance contrast between the safety sign and its background when mounted or displayed. The safety signs should be reproduced exactly as shown in Tables 3 to 7. However, some degree of graphical modification is permitted when cultural differences or special application formats need to be considered, provided the original meaning is retained and comprehension of the safety sign is maintained. Consistent reproduction and use of these safety signs will lead to a progressively improved degree of comprehension at the international level.

In cases where the orientation of the graphical symbol is not essential to the meaning of the safety sign, the graphical symbol may be reproduced in a mirrored form. For prohibition signs, it is essential that the prohibition bar does not obscure significant details of the graphical symbol.

NOTE The graphical symbol is the complete image containing all the graphical symbol elements as shown in the registered safety sign.

Where a registered safety sign is not available to indicate a particular desired meaning, the meaning shall be obtained either by developing a new safety sign following the design principles of ISO 3864-1 and ISO 3864-3 or by using the appropriate general sign (ISO 7010-M001, ISO 7010-P001, ISO 7010-W001), together with supplementary safety information.

<u>Tables 3</u> to <u>7</u> give a description of the application of each safety sign and present the safety sign originals according to their category as follows:

_	E: signs indicating an evacuation route, the location of safety equipment or a safety facility, or a safety action (safe condition signs)	y see <u>Table 3</u> ;
_	F: fire equipment signs	see <u>Table 4</u> ;
_	M: mandatory action signs	see <u>Table 5</u> ;
_	P: prohibition signs	see <u>Table 6</u> ;
_	W: warning signs	see <u>Table 7</u> .

Table 2 — Summary of all safety signs

	Category				
	E	F	M	P	W
	Evacuation route, location of safety equipment or safety facility, safety action (safe condition signs)	Fire equipment signs	Mandatory action signs	Prohibition signs	Warning signs
Safety sign	文			0	
Reference number	E001	F001	M001	P001	W001
Referent	Emergency exit (left hand)	Fire extinguisher	General mandatory action sign	General prohibition sign	General warning sign
Safety sign	文				
Reference number	E002	F002	M002	P002	W002
Referent	Emergency exit (right hand)	Fire hose reel	Refer to instruction manual/booklet	No smoking	Warning; Explosive material
Safety sign		劃			
Reference number	E003	F003	M003	P003	W003
Referent	First aid	Fire ladder	Wear ear protection	No open flame; Fire, open ignition source and smoking prohibited	Warning; Radioactive material or ionizing radiation

Table 2 (continued)

	Category				
	E	F	M	P	W
	Evacuation route, location of safety equipment or safety facility, safety action (safe condition signs)	Fire equipment signs	Mandatory action signs	Prohibition signs	Warning signs
Safety sign	<b>(</b> +				*
Reference number	E004	F004	M004	P004	W004
Referent	Emergency telephone	Collection of firefighting equipment	Wear eye protection	No thoroughfare	Warning; Laser beam
Safety sign	withdrawn			(12)	(((-1))
Reference number	E005	F005	M005	P005	W005
Referent	Direction, arrow (90° increments), safe condition	Fire alarm call point	Connect an earth terminal to the ground	Not drinking water	Warning; Non-ionizing radiation
Safety sign	withdrawn				
Reference number	E006	F006	M006	P006	W006
Referent	Direction, 45° arrow (90° increments), safe condition	Fire emergency telephone	Disconnect mains plug from electrical outlet	No access for forklift trucks and other industrial vehicles	Warning; Magnetic field

 Table 2 (continued)

	Category				
	E	F	M	P	W
	Evacuation route, location of safety equipment or safety facility, safety action (safe condition signs)	Fire equipment signs	Mandatory action signs	Prohibition signs	Warning signs
Safety sign	7 . K			C C	<u>F.</u>
Reference number	E007	F007	M007	P007	W007
Referent	Evacuation assembly point	Fire protection door	Opaque eye protection must be worn	No access for people with active implanted cardiac devices	Warning; Floor- level obstacle
Safety sign	Xm.				
Reference number	E008	F008	M008	P008	W008
Referent	Break to obtain access	Fixed fire extinguishing battery	Wear safety footwear	No metallic articles or watches	Warning; Drop (fall)
Safety sign	+		III S		
Reference number	E009	F009	M009	P009	W009
Referent	Doctor	Wheeled fire extinguisher	Wear protective gloves	No climbing	Warning; Biological hazard
Safety sign Reference	E010	F010	M010	P010	W010
number Referent	Automated external heart defibrillator	Portable foam applicator unit	Wear protective clothing	Do not touch	Warning; Low temperature/ freezing conditions

Table 2 (continued)

	Category				
	E	F	M	P	W
	Evacuation route, location of safety equipment or safety facility, safety action (safe condition signs)	Fire equipment signs	Mandatory action signs	Prohibition signs	Warning signs
Safety sign			- T	A STATE OF THE PARTY OF THE PAR	
Reference number	E011	F011	M011	P011	W011
Referent	Eyewash station	Water fog applicator	Wash your hands	Do not extinguish with water	Warning; Slippery surface
Safety sign	*				4
Reference number	E012	F012	M012	P012	W012
Referent	Safety shower	Fixed fire extinguishing installation	Use handrail	No heavy load	Warning; Electricity
Safety sign	+				
Reference number	E013	F013	M013	P013	W013
Referent	Stretcher	Fixed fire extinguishing bottle	Wear a face shield	No activated mobile phones	Warning; Guard dog
Safety sign	((•﴿ ﴿				
Reference number	E014	F014	M014	P014	W014
Referent	Child seat presence and orientation detection system (CPOD)	Remote release station	Wear head protection	No access for people with metallic implants	Warning; Forklift trucks and other industrial vehicles