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Graphical symbols, safety identification, signs, shapes, symbols and colours, comprehensibility

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Addendum 3

Attached is ISO/DIS 7010 "Graphical symbols – Safety signs in workplaces and public areas".

NOTE: For technical reasons, this document is reproduced in black and white only. A colour version is available electronically (<http://www.unece.org/trans/danger/danger.htm>).



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Graphical symbols — Safety signs in workplaces and public areas

(Partial revision of ISO 3864:1984)

Symboles graphiques — Signaux de sécurité sur les lieux de travail et dans les lieux publics

ICS 01.080.10; 01.080.99

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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 3.

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.

International Standard ISO 7010 was prepared by Technical Committee ISO/TC 145, *Graphical symbols*, Subcommittee SC 2, *Safety identification, signs, shapes, symbols and colours*.

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 more recently in the extensive mobility of labour requires a common method of communicating safety information.

Education is an essential part of any system that provides safety information.

Lack of standardization may lead to confusion and perhaps accidents.

The use of standardized safety signs does not replace proper work methods, instructions and accident prevention training and/or measures.

NOTE Some countries' statutory regulations may differ in some respect from those given in this International Standard.

Graphical symbols — Safety signs in workplaces and public areas

1 Scope

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

The shape and colour that is required to be used for each sign as prescribed by ISO 3864-1 is given together with the graphical symbols contained within each sign.

This standard shall apply generally to all types of premises and other locations, particularly public areas and workplaces, and all premises where there is a requirement for safety information to be conveyed by means of safety signing.

It does not however, apply to signalling used for rail, road, maritime and air traffic, and in general to those sectors subject to a regulation that differs as regards to certain points of this document and those contained within ISO 3864-1.

ISO 7010 is intended to be used by all other Technical Committees within ISO charged to develop specific safety signing for their industry, to ensure that there is only one safety sign for each safety meaning.

This International Standard comprises safety sign originals that may be scaled for reproduction and application purposes. It is intended that this standard will be continually amended and revised with safety signs standardized by ISO, applying the principles given in ISO 3864-1.

Safety signs given in this standard are considered to have achieved a satisfactory degree of comprehension as established by independent testing or as a result of their use and application at an international level.

The use of supplementary text signs in conjunction with these safety signs may be used to increase comprehension.

2 Definitions

For the purposes of this International Standard, the terms and definitions given in ISO 3864-1 and the following apply:

2.1

safety colour

colour of special properties to which a safety meaning is attributed

2.2

safety shape

geometric shape to which a safety meaning is attributed

2.3

safety symbol

graphical symbol used together with a safety colour and safety shape to form a safety sign

2.4

safety sign

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

2.5

supplementary sign

sign used together with one of the safety signs which provides supplementary information

2.6

referent

subject represented by the graphical symbol

2.7

field of application

context in which the use of a graphical symbol or sign to convey a message is appropriate

2.8

application format

type of object on which the symbol or sign is intended to be used

2.9

image content

elements of the graphical symbol or sign and their relative juxtaposition

2.10

standard image content

image content as described for each referent in this standard

2.11

guide-line example

selected graphical interpretation of the graphical symbol or sign which conforms to the standard image content

3 Reference indexes

The following indexes are provided to facilitate the search for standardized safety symbols.

This standard will be maintained electronically with these indexes as the basis for the database and that each safety sign standardized will have a unique reference number.

3.1 Index by referent (safety meaning)

This index is in alphabetical order of the referent and provides the safety sign reference number (see table 1).

3.2 Index by functional reference number

This index is in numerical order within the different categories of safety signing according to their function (see table 1)

- E is the category for means of escape and emergency equipment signs (safe condition signs)
- F is the category for fire safety signs
- M is the category for mandatory instruction and action safety signs
- P is the category for prohibition safety signs
- W is the category for warning safety signs

Table 1 — Reference indexes

Index by referent (safety meaning)	Index by functional reference number
Emergency exit (left hand)	E001
Emergency exit (right hand)	E002
First aid	E003
Emergency telephone	E004
Direction, arrow (90° increments), safe condition	E005
Direction, arrow (45° increments), safe condition	E006
Fire extinguisher	F001
Fire hose reel	F002
Fire ladder	F003
Fire fighting equipment, collection of	F004
Fire alarm call point	F005
Fire emergency telephone	F006
General mandatory sign	M001
General prohibition sign	P001
No smoking	P002
Naked flames forbidden; fire, open ignition source and smoking prohibited	P003
No thoroughfare	P004
Not drinking water	P005
No access for fork lift trucks and other industrial vehicles	P006
No access for persons with pacemakers	P007
No metallic articles or watches	P008
General warning sign	W001
Explosive material, warning	W002
Radioactive material, warning	W003
Laser beam, warning	W004
Non-ionising radiation, warning	W005
Magnetic field, warning	W006
Obstacles, warning	W007
Drop (fall), warning	W008
Biological hazard, warning	W009
Low temperature/freezing conditions, warning	W010
Slippery surface, warning	W011

3.3 Index of safety signs by category and reference number

The following is a graphical index of the standardised safety signs for public areas and workplaces, listed in terms of the five safety sign categories defined by geometric shape and colour as required by ISO 3864-1.

Safe Condition Signs



Fire Safety Signs



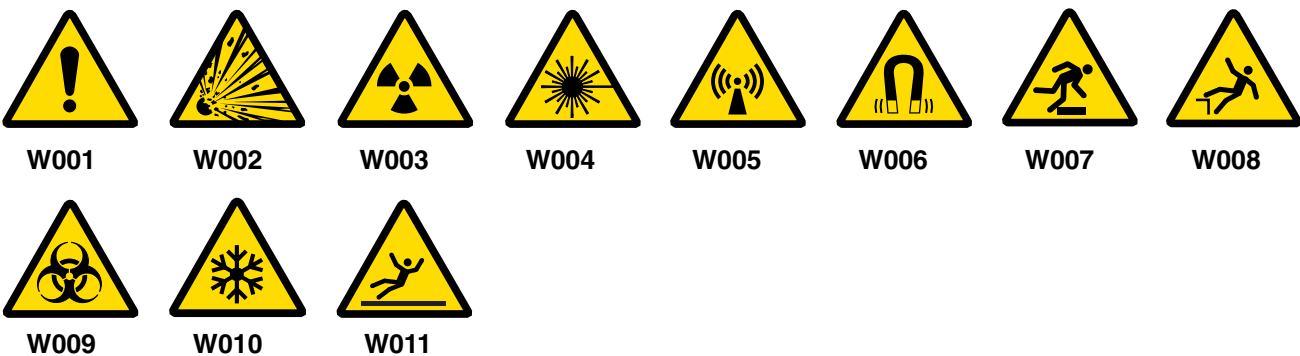
Mandatory Action Signs



Prohibition Signs



Warning Signs



4 Standardized safety signs

The following safety sign originals are provided in a uniform 75mm size with corner marks to enable accurate enlargement and reduction. The sign illustrations are shown without borders in order to allow for consistent reproduction scaling, though the use of borders is encouraged as defined by ISO 3864-1. The safety signs should be reproduced exactly as shown. However, some degree of graphical modification is permitted when cultural differences or special application formats must be considered, provided comprehension of the sign is maintained. Consistent reproduction and use of these safety signs is expected to lead to a progressively improved degree of comprehension at the international level.



E001

Referent

Emergency exit (left hand)

Function

To signify an escape route

Standard Image Content

Full view of man moving (to left) through doorway

Field of Application

Both for everyday use; Public places and in places of work

Safety: Safe condition

Format of Application

Safety signing

Supplementary arrow sign is used to give directional information (E005, E006)

Safety manuals and notices

To improve conspicuity, use with a supplementary sign

Additional Information

See ISO DIS 3864-1 for examples of use



E002

Referent

Emergency exit (right hand)

Function

To signify an escape route

Standard Image Content

Full view of man moving (to right) through doorway

Field of Application

Both for everyday use; public places and in places of work

Safety: Safe condition

Format of Application

Safety signing

Supplementary arrow sign is used to give directional information (E005, E006)

Safety manuals and notices

To improve conspicuity, use with a supplementary sign

Additional Information

See ISO DIS 3864-1 for examples of use 1

**E003****Referent**

First aid

Function

To signify the location of first aid equipment or facilities

Standard Image Content

A white cross on a green background or an alternative appropriate recognised ethnic device

Field of Application

For places of work, manufacturers and users

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension.

**E004****Referent**

Emergency telephone

Function

For summoning first aid or rescue

Standard Image Content

Telephone receiver in profile, with determinative cross or with another appropriate element, evocative for the targeted cultural group

Field of Application

Both for everyday use; Public places and in places of work

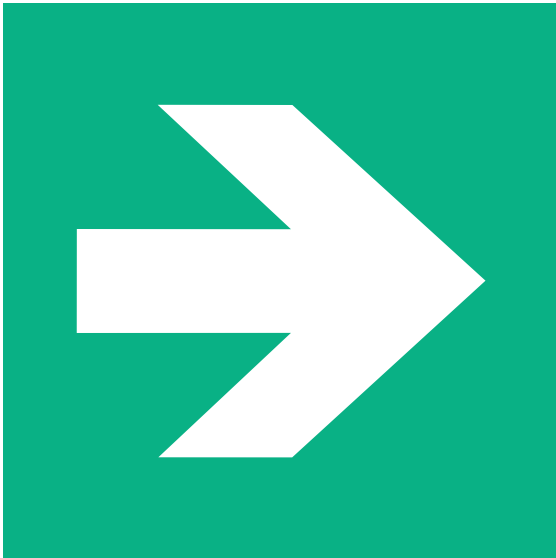
Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension.



E005

Referent

Direction

Function

To indicate direction (the arrow may be rotated in increments of 90° from the vertical)

Standard Image Content

Arrow with Belgian head, with angle at apex of between 84° and 86°

Field of Application

Both for everyday use; Public places and in places of work

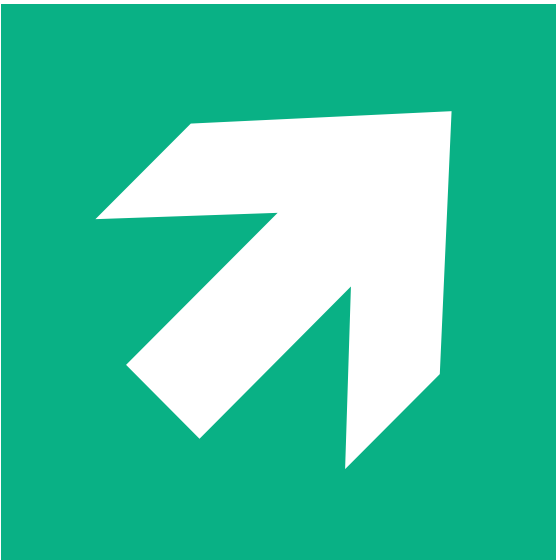
Format of Application

Safety signing as supplementary sign

Safety manuals and notices

Additional Information

See ISO DIS 3864-1 supplementary sign



E006

Referent

Direction

Function

To indicate direction (the arrow may be rotated in increments of 90° from 45°)

Standard Image Content

Arrow with Belgian head, with angle at apex of between 84° and 86°

and 86°

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing as supplementary sign

Safety manuals and notices

Additional Information

See ISO DIS 3864-1 supplementary sign

**F001****Referent**

Fire extinguisher

Function

To signify a fire extinguisher

Standard Image Content

Front view of fire extinguisher with determinative flames

Field of Application

Both for everyday use; Public places and places of work

Format of Application

Fire safety signing

Fire safety manuals and notices

Additional Information

ISO comprehension test series 1979/80 run by Easterby & Graydon, AP reports 99 & 100

**F002****Referent**

Fire hose reel

Function

To signify fire equipment

Standard Image Content

Fire hose reel in profile, with determinative flames

Field of Application

Both for everyday use; Public places and places of work

Format of Application

Fire safety signing

Fire safety manuals and notices

Additional Information

ISO comprehension test series 1979/80 run by Easterby & Graydon, AP reports 99 & 100



F003

Referent

Fire ladder

Function

To signify a fire ladder

Standard Image Content

Front view of vertical ladder, with determinative flames

Field of Application

Both for everyday use and places of work

Format of Application

Fire safety signing

Fire safety manuals and notices

Additional Information

ISO comprehension test series 1979/80 run by Easterby & Graydon, AP reports 99 & 100



F004

Referent

Collection of fire fighting equipment

Function

To signify a collection of fire fighting equipment

Standard Image Content

Fire helmet, with determinative flames

Field of Application

Both for everyday use and in places of work

Fire safety

Format of Application

Fire safety signing

Fire safety manuals and notices

Additional Information

ISO comprehension test series 1979/80 run by Easterby & Graydon, AP reports 99 & 100. The shape of the helmet may be changed to better represent a country's style of fire helmet.

**F005****Referent**

Fire alarm call point

Function

To signify a fire alarm call point

Standard Image Content

Hand with projecting finger on push button of call point, with determinative flames

Field of Application

Both for everyday use; Public places and places of work
Fire safety

Format of Application

Fire safety signing

Fire safety manuals and notices

Additional Information

ISO comprehension test series 1979/80 run by Easterby & Graydon, AP reports 99 & 100

**F006****Referent**

Fire emergency telephone

Function

To signify fire emergency telephone

Standard Image Content

Telephone receiver shown in profile, with determinative flames

Field of Application

Both for everyday use; Public places and places of work
Fire safety

Format of Application

Fire safety signing

Fire safety manuals and notices

Additional Information

ISO comprehension test series 1979/80 run by Easterby & Graydon, AP reports 99 & 100



M001

Referent

General mandatory sign

Function

To signify a mandatory action

Standard Image Content

Exclamation mark

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Additional Information

Requires supplementary sign to give further information



P001

Referent

General prohibition sign

Function

To signify a prohibited action

Standard Image Content

None, prohibition shape and colour only

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Requires supplementary sign to give further information

**P002****Referent**

No smoking

Function

To prohibit the smoking of cigarettes, pipes, cigars etc

Standard Image Content

Cigarette shown in profile with smoke

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**P003****Referent**

Naked flames forbidden

Fire, open ignition source and smoking prohibited

Function

To prohibit smoking and all forms of naked flame

Standard Image Content

Match shown as profile with flame

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



P004

Referent

No thoroughfare

Function

To prohibit an unauthorised person from using a designated thoroughfare

Standard Image Content

Stylised man walking (left hand)

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



P005

Referent

Not drinking water

Function

To prohibit the drinking of unsuitable water

Standard Image Content

Tap above glass containing water indicated by wavy lines

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**P006****Referent**

No access for fork lift trucks and other industrial vehicles

Function

To prohibit the use of fork lift trucks and other industrial vehicles in hazardous areas

Standard Image Content

Truck shown as profile with stylised driver

Field of Application

Both for everyday use; Public places and in places of work

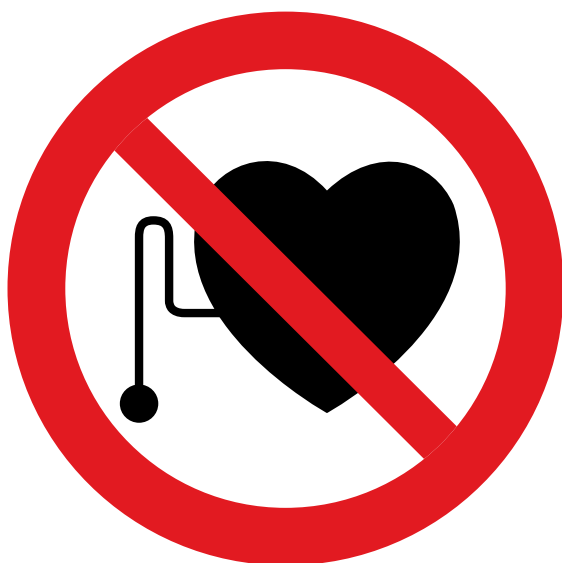
Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**P007****Referent**

No access for persons with pacemakers

Function

To prohibit a person from passing through a device that might harm a pacemaker

Standard Image Content

Stylised heart shape with cable

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



P008

Referent

No metallic articles or watches

Function

To prohibit metallic articles and watches in a designated area

Standard Image Content

Stylised face of an analog wristwatch and the flat side of a key

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing
Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



W001

Referent

General warning sign

Function

To signify a general warning

Standard Image Content

Exclamation mark

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing
Safety manuals and notices

Additional Information

Requires supplementary sign to give further information

**W002****Referent**

Warning; Explosive material

Function

To warn of a hazard or danger from explosive materials

Standard Image Content

Stylised exploding bomb

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**W003****Referent**

Warning; Radioactive material

Function

To warn of a hazard or danger from radioactive material

Standard Image Content

As abstract image shown opposite

Field of Application

Both for everyday use; Public places and in places of work

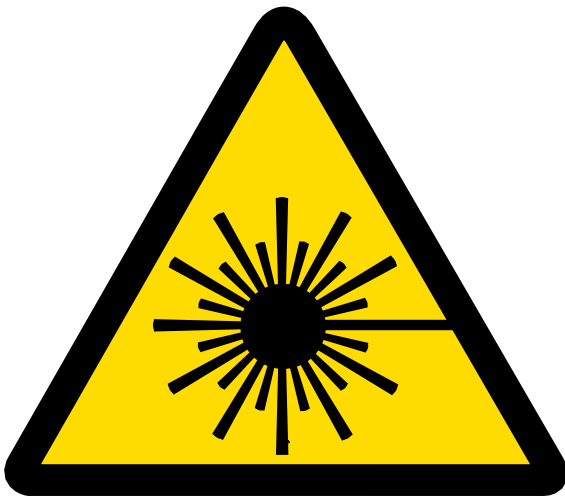
Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



W004

Referent

Warning; Laser beam

Function

To warn of a hazard or danger from a laser beam

Standard Image Content

As abstract image shown opposite

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



W005

Referent

Warning; Non-ionising radiation

Function

To warn of a hazard or danger from non-ionising radiation

Standard Image Content

As abstract image shown opposite

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**W006****Referent**

Warning; Magnetic field

Function

To warn of a hazard or danger from a magnetic field

Standard Image Content

Stylised magnet with two radiating arcs either side

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**W007****Referent**

Warning; Obstacles

Function

To warn of a hazard or danger from obstacles

Standard Image Content

Stylised man tripping over floor obstacle

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



W008

Referent

Warning; Drop (fall)

Function

To warn of a hazard or danger from a drop

Standard Image Content

Stylised man falling from the edge of a surface

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension



W009

Referent

Warning; Biological hazard

Function

To warn of a hazard or danger from a biological hazard

Standard Image Content

As abstract image shown opposite

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**W010****Referent**

Warning; Low temperature/freezing conditions

Function

To warn of a hazard or danger from low temperature

Standard Image Content

As abstract image shown opposite

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text sign may be used to increase comprehension

**W011****Referent**

Warning; Slippery surface

Function

To warn of a hazard or danger from a slippery surface

Standard Image Content

Stylised man falling on a slippery surface

Field of Application

Both for everyday use; Public places and in places of work

Format of Application

Safety signing

Safety manuals and notices

Additional Information

Supplementary text may be used to increase comprehension