

DRAFT INTERNATIONAL STANDARD

ISO/DIS 28564-2

ISO/TC 145/SC 1
Voting begins on:
2015-03-26

Secretariat: BSI
Voting terminates on:
2015-06-26

Public information guidance systems —

Part 2: Design principles and requirements for location signs and direction signs

Systèmes de guidage destinés à l'information du public —

Partie 2: Principes de conception et exigences pour panneaux de direction et de localisation

ICS: 01.080.10

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Reference number
ISO/DIS 28564-2:2015(E)

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Published in Switzerland

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 General.....	2
5 Preparation.....	2
5.1 Need.....	2
5.2 Brief.....	2
5.3 Gathering data.....	3
5.4 Information to be included in the brief.....	3
5.5 Positioning.....	3
5.6 Planning strategy.....	4
6 Design principles, characteristics and layout of visual elements.....	4
6.1 Design principles.....	4
6.1.1 Legibility.....	4
6.1.2 Consistency.....	4
6.1.3 Simplicity.....	5
6.1.4 Prioritization of messages.....	5
6.1.5 Use of languages.....	5
6.1.6 Use of jargon and abbreviations.....	5
6.1.7 Inclusivity (for all potential user groups).....	5
6.1.8 Handling environmental sensitivity.....	5
6.2 Characteristics.....	6
6.2.1 Graphical symbols.....	6
6.2.2 Arrows.....	6
6.2.3 Text and numerals.....	7
6.2.4 Colour.....	7
6.2.5 Containing shape.....	8
6.3 Layout.....	8
6.3.1 General.....	8
6.3.2 Relationship of symbols, arrows and text.....	8
7 Sign carrier.....	13
7.1 Materials.....	13
7.2 Glare and reflections.....	13
7.3 Illumination.....	13
7.4 Sustainability.....	13
8 Inspection and updating.....	13
9 Testing.....	13
Annex A (informative) Examples of location signs and direction signs in typical environments.....	14
Annex B (informative) Performance tests for a wayfinding system of location signs and direction signs.....	18
Bibliography.....	25

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.

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.

ISO 28564-2 was prepared by Technical Committee ISO/TC 145, *Graphical symbols*, Subcommittee SC 1, *Public information symbols*.

ISO 28564 consists of the following parts, under the general title *Public information guidance systems*:

- *Part 1: Design principles and element requirements for location plans, maps and diagrams;*
- *Part 2: Guidelines for the design and use of location signs and direction signs.*

Additional parts will be developed in due course.

Introduction

Continued growth in travel and mobility within and between countries has generated a growing range of wayfinding guidance systems and styles containing a wide variety of information. Such systems serve various purposes, such as enabling users to:

- understand the range of facilities and points of interest present;
- understand the physical relationship between these facilities and points of interest; and
- determine the best way to reach a required facility or point of interest given their mobility circumstances.

This part of ISO 28564 is concerned with location signs and direction signs used to support wayfinding.

The purpose of this part of ISO 28564 is to provide guidance on the design and use of location signs and direction signs to enable users to assimilate required information swiftly and accurately, and act upon the information shown safely and conveniently. It is not the intention to limit design freedom unnecessarily, but to set guidelines and, where appropriate, specifications which reflect relevant research and best practice.

Where appropriate, location signs and direction signs may be used in association with fixed location plans, maps and diagrams (see ISO 28564-1), notices and instructions, hand-held maps, mobile electronic devices as well as human assistance, as part of an integrated wayfinding system.

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Public information guidance systems —

Part 2:

Design principles and requirements for location signs and direction signs

1 Scope

This Part of ISO 28564 gives guidelines for the design and use of location signs and direction signs in public areas and working places. It is relevant to such signs in, for example, shopping centres, stores, hospitals, bus and train stations, airports, sporting and entertainment complexes, urban areas, parks, gardens and countryside, public attractions, museums and office complexes.

It is not applicable to safety signs or to those sectors subject to regulations and/or different/specific design principles (for example, traffic signs on a public highway). However, in a given public environment, or within a wayfinding and signing design brief, public information may need to be associated with other messaging, so many of the principles contained in this standard will be relevant in the planning of a coordinated scheme.

NOTE Public information guidance systems can be used with safety way guidance systems (See ISO 16069).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 7001, *Graphical symbols — Public information symbols*

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

ISO 9186-1, *Graphical symbols — Test methods — Part 1: Method for testing comprehensibility*

ISO 9186-2, *Graphical symbols — Test methods — Part 2: Method for testing perceptual quality*

ISO 17724, *Graphical symbols — Vocabulary*

ISO 22727, *Graphical symbols — Creation and design of public information symbols — Requirements*

ISO 28564-1, *Public information guidance systems — Part 1: Design principles and element requirements for location plans, maps and diagrams*

3 Terms and definitions

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

- 3.1 location sign**
sign used to identify the location of a place, facility or function
- 3.2 direction sign**
sign used to indicate the route to a place, facility or function
- 3.3 visual element**
component of a sign including, variously, graphical symbol(s), arrow(s), text, numeral(s), illustration(s), colour or shape

4 General

For a specific destination, using only a few location signs can be effective. It might be necessary to use numerous direction signs as part of a route. In either case, a design objective should be to use the minimum number of signs necessary to provide effective guidance.

5 Preparation

5.1 Need

The need for a location sign and/or a direction sign can arise for various reasons, e.g.:

- a) known difficulties experienced by users in finding a place, facility or function; or

NOTE Sometimes the solution to an apparent problem is best resolved by the re-design of the facility and fittings, the control of other environmental factors or the role, training and deployment of staff rather than by the inclusion, amendment or removal of a sign.

- b) changes in an environment or construction of a new environment.

5.2 Brief

Before design work is undertaken, the requirements and objectives should be clearly understood and expressed in a brief. Even where a small number of signs – or even a single sign – is involved, a brief should be prepared.

The brief is the responsibility of the client and should define:

- a) the physical area to be covered;
- b) its relationship to adjacent areas;
- c) the information to be shown as determined by the tasks that expected users wish to accomplish;
- d) the anticipated normal viewing distances;
- e) any special requirements concerning information presentation and/or the nature and constraints of the site.

If relevant, the brief should also define the requirement for maps and/or location plans (see ISO 28564-1), safety signs (see ISO 7010), advisory/information notices and the requirement and/or method for coordination with location and direction signs.

5.3 Gathering data

When the facilities within the area to be covered are in the planning stage, information should be obtained, as appropriate, from architects, designers, engineers and other professionals with knowledge relevant to the task.

When the facility is already in use, additional information may be obtained by:

- a) observing users' behaviour;
- b) consulting with users;
- c) consulting with local police, shopkeepers, reception/information desk staff and others who might have experience of wayfinding issues within the area to be covered; and
- d) reviewing any existing location signs and direction signs in the area to be covered and in adjacent areas.

NOTE A site visit is normally needed to gain familiarity with the environment and, where possible, to observe and document relevant behavioural patterns.

Once gathered, the data should be reconciled with the brief.

5.4 Information to be included in the brief

The following information should be included:

- The characteristics of the expected users.
- The types and positions of the facilities in the area.
- The routes and decision points relating to specific destinations.
- Accessibility and other user requirements.
- Additional information, if appropriate, e.g. travel time and distance.
- The proportion of the expected users for whom the use of the official local languages might be insufficient.
- Any statutory or regulatory requirements.

5.5 Positioning

Examples of the positioning of location signs and direction signs are shown in [Annex A](#).

Location signs and direction signs are typically positioned as follows:

- a) Fixed to, applied on or projected from vertical surfaces (see [Annex A](#)).
- b) Suspended from ceilings, roofs or soffits (see [Figure A.1](#)).
- c) Projected from floors or attached to existing floor projections (see [Annex A](#)).

Location signs should be positioned above or immediately adjacent to the destination. Direction signs should be placed at or prior to decision points (such as crossings, junctions) and elsewhere to give reassurance or minimize confusion.

Placement height and angle should be carefully considered to take into account whether users are standing or seated, and their direction of approach to the sign.

In an existing environment, careful consideration should be given to how viewing of the signs can be affected by:

- existing signs and other features (e.g. lighting, advertising);
- ambient and natural lighting;
- physical obstructions.

In an environment yet to be designed/constructed, the building design and the plan for location signs and direction signs should be coordinated, as far as practical to ensure:

- building structure, services and other facilities do not compromise the optimum location for and visual perception and clarity of signs;
- building structure allows for the fixing and erection of signs in necessary locations;
- optimum ambient and natural lighting conditions for the reading and interpretation of signs.

5.6 Planning strategy

Having gathered the necessary information, a strategy defining the content, number and placement of signs required to address the brief should be prepared. Normally the strategy takes the form of a plan or elevation showing the physical position (and possibly the scale) of signs, together with an associated schedule with specifications for the signs indicated on the plan or elevation. The strategy should also identify other changes required, e.g. the removal or alteration of existing signs.

NOTE For complex projects, or where the signs involved are large and costly, other techniques such as 3D or video modelling are appropriate.

6 Design principles, characteristics and layout of visual elements

6.1 Design principles

6.1.1 Legibility

The visual elements should be clear and legible by ensuring, for example:

- a) the use of highly legible fonts;
- b) the use of standardized graphical symbols where available;
- c) contrast with the background upon which the sign is placed and the environment within which it sits;
- d) contrast and compatibility with other environmental graphical elements (e.g. advertising) or with potentially competing identities;
- e) appropriate spacing and scaling.

6.1.2 Consistency

When a series of location signs and direction signs is required, an integrated design philosophy should be followed with the same terminologies and graphical principles (e.g. font style, size and weight, colour and placement) throughout. See [Annex A](#).

It may also be appropriate to ensure similar consistency with associated location plans, maps and diagrams (see ISO 28564-1), notices and instructions, hand-held maps and IT applications.

NOTE Consistency is important to promote user familiarity and comprehension of the signs.

6.1.3 Simplicity

The design shall be as simple as possible. The following should be taken into account:

- a) The display on an individual sign of only the number of messages which can be assimilated simply and accurately by the intended users.

NOTE If more messages are required at a given location, the use of more than one sign is to be considered;

- b) Use of the simplest expression for each message to be conveyed.
- c) Use of the minimum number of visual elements necessary for effective comprehension.

6.1.4 Prioritization of messages

The relative importance of different messages should be conveyed using varied techniques e.g. different fonts, size, weight, colour, separation rules or sequential placement. In some cases separate signs for different information categories may be appropriate.

6.1.5 Use of languages

The use of the official local languages may be sufficient when international travellers or clients are not a concern. For situations that require international understanding, English should be used in addition to the official local languages.

6.1.6 Use of jargon and abbreviations

Jargon should be avoided. Specialized terms and abbreviations should be used only where the intended users are known to be familiar with them.

NOTE In environments with multiple user groups, a sign provided for a specific audience is also read by others who could be confused by the use of unfamiliar or ambiguous terms and abbreviations.

6.1.7 Inclusivity (for all potential user groups)

The design of signs should optimize readability and legibility for all intended users, including those with reduced vision or cognitive impairments. The use of tactile elements e.g. Relief and/or Braille should be considered where appropriate.

NOTE 1 Design requirements for partially sighted people are given in ISO 21542.

NOTE 2 In some countries the requirements for signs to conform to the needs of those with disability are prescribed in statutes or regulations.

Colour combinations should take into account the needs of those with colour-vision deficiency (see also [6.2.4](#)).

Where accessible routes are provided, these shall be indicated.

6.1.8 Handling environmental sensitivity

In many environments (e.g. national parks and gardens, historic buildings, and some modern buildings), it can be appropriate to use structures, materials, colours, and fonts sympathetic to that environment. See [Annex A](#).

The location of a facility could require a feature sign with distinctive architectural or design characteristics. This is less likely for a sequence of direction signs. In all cases the design should not compromise the swift, accurate, and safe comprehension of the information.