# INTERNATIONAL STANDARD

ISO 28564-2

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# Public information guidance systems —

Part 2:

Guidelines for the design and use of location signs and direction signs

Teh ST Systèmes de guidage destinés à l'information du public —

Partie 2: Lignes directrices pour la conception et l'utilisation des panneaux de direction et de localisation

ISO 28564-2:2016

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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 <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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 145, *Graphical symbols*, Subcommittee SC 1, *Public information symbols*.

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

- db9753b3001b/iso-28564-2-2016
   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

The following part is under preparation:

— Part 3: Guidelines for the design and use of information index 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 are used in association with fixed location plans, maps and diagrams (see ISO 28564-1), information index signs (see ISO 28564-3<sup>1)</sup>), 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:

# Guidelines for the design and use of location signs and direction signs

# 1 Scope

This part of ISO 28564 gives a range of guidelines for various stages of preparation, design, construction, inspection, updating and testing which comprise a location sign or a direction sign used in public places and working areas.

This part of ISO 28564 is applicable to the design and use of location signs and direction signs used in all sorts of public places, such as shopping centres, stores, hospitals, bus and railway stations, airports, sporting, exhibition halls and entertainment complexes, urban areas, parks, gardens and countryside, public attractions, museums and commercial office buildings. The design and use of location signs and direction signs in working areas can also resort to the content for reference.

It is not applicable to those sectors (for example, traffic signs on a public highway), which are subject to regulations or specified design principles. However, in a given public environment or within a wayfinding and signing design brief, public information sometimes needs to be associated with other messaging, so many of the principles contained in this part of ISO 28564 can be relevant in the planning of a coordinated scheme.

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### **2 Normative references** db9753b3001b/iso-28564-2-2016

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 17724, 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

#### 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 used in a sign including graphical symbol, arrow, text, numeral, illustration, colour and shape

#### General 4

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.

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#### **5.1** Need

The need for a location sign or a direction sign (or both) can arise for various reasons, for example

- known difficulties experienced by users in finding a place, facility or function, or
  - 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. ileh STANDARD PREVIEN

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

the physical area to be covered;

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- $its\ relationship\ to\ adjacent/arreas; ds. iteh. ai/catalog/standards/sist/b7565b99-fb66-42bd-81aa-relationship\ to\ adjacent/arreas.$ db9753b3001b/iso-28564-2-2016
- the information to be shown as determined by the tasks that expected users wish to accomplish;
- any special requirements concerning presentation of information, the nature and constraints of the site.

If relevant, the brief should also define the requirements for maps and locations plans (see ISO 28564-1). information index signs (see ISO 28564-32)), and requirements or methods for coordination with location signs and direction signs.

# Information to be included in the brief

The following information of the covered area 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;
- the possible setting position and the anticipated normal viewing distances;
- 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 local languages can be insufficient;

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<sup>2)</sup> Under preparation.

any statutory or regulatory requirements.

# 5.4 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 can 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.

# 5.5 Positioning iTeh STANDARD PREVIEW

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); aa-
- 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 (for example, lighting, advertising),
- ambient and natural lighting, and
- physical obstructions.

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

- 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 required changes (for example, 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 and conspicuity

The visual elements should be clear, legible and conspicuous 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 with other environmental visual elements, including advertising or commercial signs and decorative colour schemes, and (standards iteh ai)
- e) appropriate spacing and scaling.

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### 6.1.2 Consistency

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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 (for example, font style, size and weight, colour and placement) throughout (see Annex A).

The design philosophy should be consistent with associated location plans, maps and diagrams (see ISO 28564-1), with information index signs (see ISO 28564-3<sup>3</sup>), and with 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 should be as simple as practicable. 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, it can be appropriate to use more than one sign.
- 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.

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<sup>3)</sup> Under preparation.

## 6.1.4 Prioritization of messages

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

## 6.1.5 Use of languages

The use of the 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 (for example, relief and braille) should be considered where appropriate propriate propri

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. ISO 28564-2:2016

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 Environmental sensitivity

In many environments (for example, 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  $\underline{\text{Annex A}}$ ).

The location of a facility can use 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.

#### 6.2 Characteristics

### 6.2.1 Graphical symbols

Using graphical symbols can improve the understanding of a message expressed in text. If a language is used that is unknown to the reader of the message, adding graphical symbols can help to overcome the language barrier. When used alone, graphical symbols can allow a smaller sign size.

Graphical symbols should be taken from ISO 7001, ISO 7010 and ISO 20712-1. If a new graphical symbol is required, ISO 22727 should be used to guide the design process. Consideration should be given to

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comprehension testing in accordance with ISO 9186-1, perceptual quality testing in accordance with ISO 9186-2 and to symbol referent association testing in accordance with ISO 9186-3.

NOTE 1 Graphical symbols in ISO 7001 and ISO 7010 are included in the ISO online browsing platform (www. iso.org/obp).

NOTE 2 Information on procedures, criteria of acceptability and templates for public information symbols is given on the website of ISO/TC 145/SC1 and ISO/TC 145/SC2 as <a href="http://www.iso.org/tc145/sc1">http://www.iso.org/tc145/sc1</a> and <a href="http://www.iso.org/tc145/sc1">http://www.iso.org/tc145/sc1</a> and <a href="http://www.iso.org/tc145/sc1">http://www.iso.org/tc145/sc1</a> and <a href="http://www.iso.org/tc145/sc2">http://www.iso.org/tc145/sc1</a> and <a href="http://www.iso.org/tc145/sc2">http://www.iso.org/tc145/sc1</a> and <a href="http://www.iso.org/tc145/sc2">http://www.iso.org/tc145/sc2</a> and <a href="http://www.iso.org/tc145/sc2">http://www.iso

Images, icons and branding symbols can be used when

- they can be perceived, read and understood at the relevant viewing distances and conditions,
- they are likely to be readily recognizable by the intended users, and
- their use is not likely to compromise the effectiveness of the sign or the balance and priority of all messages on the sign.

# 6.2.2 Arrows

Arrows in direction signs should be used in conjunction with symbols or text (or both) to indicate the direction of movement a person should take to reach the indicated destination. The representation of the arrow should be as defined in ISO 7001 and shown in Figure 1. Arrows should be organized on the sign or the sign positioned so that the arrows unambiguously convey the intended route. The meanings of different arrow orientations are shown in Table 1.



Figure 1 — Direction arrow (ISO 7001, PI PF 030)