

BS ISO 24409-3:2014



BSI Standards Publication

Ships and marine technology — Design, location and use of shipboard safety signs, safety- related signs, safety notices and safety markings

Part 3: Code of practice

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National foreword

This British Standard is the UK implementation of ISO 24409-3:2014.

The UK participation in its preparation was entrusted to Technical Committee SME/32/-/1, Lifesaving and fire protection.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ISBN 978 0 580 54074 5

ICS 47.020.01

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2014.

Amendments issued since publication

Date	Text affected
------	---------------

INTERNATIONAL
STANDARD

ISO
24409-3

First edition
2014-01-15

**Ships and marine technology —
Design, location and use of shipboard
safety signs, safety-related signs,
safety notices and safety markings —**

**Part 3:
Code of practice**

*Navires et technologie maritime — Conception, emplacement et
utilisation des signaux de sécurité, signaux relatifs à la sécurité, notes
de sécurité et marquages de sécurité à bord des navires —*

Partie 3: Code de bonne pratique



Reference number
ISO 24409-3:2014(E)

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Published in Switzerland

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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 www.iso.org/directives).

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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 8, *Ships and marine technology*, Subcommittee SC 1, *Lifesaving and fire protection*.

ISO 24409 consists of the following parts, under the general title *Ships and marine technology — Design, location and use of shipboard safety signs, safety-related signs, safety notices and safety markings*:

- *Part 1: Design principles*
- *Part 2: Catalogue*
- *Part 3: Code of practice*

Introduction

The growth of international travel by ship and the variety of work on offshore installations have created a need to provide people travelling and working on-board ships and other marine installations with signs and associated systems that communicate consistent and effective safety information. This part of ISO 24409 specifies a system of signs on ships and other marine installations that is generally consistent with standardized systems of signs with which many will have gained familiarity in other applications.

As such, this part of ISO 24409 clarifies and supplements existing requirements set out in SOLAS regulations II-2/13.3.2.5.1, II-2/13.1.3, II-2/13.7.1.1, II-2/13.7.2, III/8, III/9, III/11.5, III/20.10, and ISO 17631.

This part of ISO 24409 is intended to improve the safety of passengers and crew on board ships and marine installations by providing guidance on the signing of escape routes, including the use of arrows to provide directional information, and in so doing to assist in orientation and in the description of the planned escape process to passengers and crew. In addition, it provides guidance in signing of the location and instructions for the use of fire-fighting equipment and life-saving equipment.

This part of ISO 24409 does not specify if and when escape route signs will be required. However, it has been assumed in the drafting of this part of ISO 24409 that its execution will be entrusted to a competent person familiar with the relevant regulatory requirements. This part of ISO 24409 is also intended for use by regulatory authorities to assist in judging compliance with appropriate IMO regulations and resolutions. It should be noted that the signing of escape routes comprises only a part of the management of means of escape. Many other considerations have to be taken into account, including the requirements of people with special needs, in order to establish a safe evacuation procedure.

This part of ISO 24409 reflects best practice; the illustrations reflect a system designed to provide the optimum amount of information to clearly identify the location and direction of the means of escape from any location within a ship, or offshore installation, to the assembly stations and appropriate survival craft embarkation stations. However, as shown in examples, by the use of supplementary text, escape route signing can also have a role to play in the management of a ship in non-emergency situations.

Ships and marine technology — Design, location and use of shipboard safety signs, safety-related signs, safety notices and safety markings —

Part 3: Code of practice

1 Scope

This part of ISO 24409 is intended to provide for the consistent use of shipboard safety and fire control plan signs, guidance on their location and size, and for the use of appropriate graphical symbols and supplementary text to furnish additional directional information. This part of ISO 24409 does not apply to low-location lighting systems (or components of such systems) which are covered in ISO 15370.

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 15370, *Ships and marine technology — Low-location lighting (LLL) on passenger ships — Arrangement*

ISO 17398, *Safety colours and safety signs — Classification, performance and durability of safety signs*

ISO 17631, *Ships and marine technology — Shipboard plans for fire protection, life-saving appliances and means of escape*

ISO 24409-1, *Ships and marine technology — Design, location and use of shipboard safety signs, safety-related signs, safety notices and safety markings — Part 1: Design principles*

ISO 24409-2, *Ships and marine technology — Design, location and use of shipboard safety signs, safety-related signs, safety notices and safety markings — Part 2: Catalogue*

International Convention for the Safety of Life at Sea, 1974 (SOLAS 1974), as amended

International Maritime Organization, *International Code for Fire Safety Systems (FSS Code)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 24409-1 and ISO 24409-2 and the following apply.

3.1

assembly station

muster station

designated internal or external space where persons are gathered in the event of an emergency

3.2

assembly station symbol

sign MES001 given in ISO 24409-2 used to identify assembly stations and which may be combined with supplementary arrow to give directional information and/or supplementary text to increase comprehension, as appropriate

**3.3
assembly station plan**

evacuation and abandon ship plan

plan, approved by the competent authority, which shows the location and the arrangement of passenger and crew assembly stations, the passenger cabins assigned to them, if any, the escape routes to get from them to the assigned survival craft, as applicable to the ship or offshore installation

Note 1 to entry: The above information may be included in the means of escape plan.

**3.4
competent authority**

administration whose flag the ship is entitled to fly, or an organization authorized by an administration to perform functions on its behalf

**3.5
embarkation station**

designated area where survival craft are boarded

**3.6
escape route**

route forming part of the means of escape from any place on-board a ship to a designated assembly station or embarkation station

**3.7
escape route sign**

exit, assembly station, or embarkation station sign with appropriate directional arrow used to guide people along escape routes to a designated assembly station or embarkation station

**3.8
escape route signing system**

comprehensive layout of escape route signs

**3.9
exit**

doorway or other suitable opening lying on the perimeter of a space and part of the means of escape from such space

**3.10
exit sign**

signs MES002 and MES003 given in ISO 24409-2 used to identify exits and which may be combined with supplementary arrow and/or text, as appropriate, to give directional information or to increase comprehension on the use of the means of escape

**3.11
fire control plan**

plan, approved by the competent authority, to be done for the guidance of the ship's officers, showing clearly for each deck the structural fire divisions provided for the ship, or installation, and the arrangements relevant to the fire detection and fire alarms systems, the fire extinguishing appliances, systems and equipment, the means of escape, and the arrangements provided for the fire protection of the ventilation systems

**3.12
life-saving appliances plan**

plan, approved by the competent authority, which lists and shows the location and the arrangement of the life-saving appliances provided for the ship

**3.13
means of escape**

doorways, corridors, stairways forming an escape route the dimensions of which are calculated in accordance with the prescriptions of the FSS Code and SOLAS '74

3.14

means of escape plan

plan, approved by the competent authority, which provides prescriptions for the on-board arrangements in accordance with the requirements set out by the FSS Code and SOLAS '74

Note 1 to entry: The elements of a means of escape plan are defined in ISO 17631, including an example in ISO 17631, Annex B.

3.15

survival craft

craft capable of sustaining the lives of persons in distress from the time of abandoning the ship

4 Escape route signing system

4.1 General

4.1.1 The objective of the escape route signing system is to ensure that from any space within a ship or other marine installation, a sign or series of signs is provided and placed so that a person is directed along an escape route toward an assembly station or embarkation station, as applicable.

4.1.2 The signing system should be designed based on the means of escape plan, assembly station plan, and life-saving appliances plan, as applicable. The operational needs of the ship in its management should also be considered.

4.2 Planning

4.2.1 The signing system should provide simple identification of the means of escape provisions to allow people to escape with minimum assistance. It should avoid possible points of confusion and, in particular, give no cause for hesitation or need for decision-making amongst alternatives. People escaping should be provided with clear, unambiguous directions from any place in the ship throughout the escape route to the assembly stations and/or embarkation stations.

4.2.2 The following areas should be taken into account in planning and designing escape route signing systems:

- a) siting and nature of all designated means of escape, in particular, noting stairway enclosures, escape ladders, and hatches;
- b) relative conspicuousness of escape routes;
- c) position of all doors and other exits sited along escape routes;
- d) escape from public spaces or open decks;
- e) provision of other systems (if any), such as low-location lighting or audible devices, to assist in wayfinding in the event of an emergency evacuation;
- f) type and positioning of ambient lights and lighting levels within the ship under both normal conditions (such as entertainment areas which may have low lighting levels as part of normal operation) and emergency lighting conditions;
- g) location and lighting of any other signs, architectural features, decor, or barriers that could conceal or divert attention from an escape route sign;

EXAMPLE A duty free store, for instance, may have many signs which compete for the viewer's attention.

- h) dead ends that may exist along escape routes are to be identified to avoid persons taking the wrong route in an emergency situation;

i) type, height, and architectural design of ceilings.

4.3 Familiarization

4.3.1 General

Information regarding signs and the signing system should be made available (for example, by information video, mimic signs, leaflets, public address system, etc.) to familiarize the crew and the passengers, in accordance with relevant regulations and requirements.

4.3.2 Orientation within the ship

4.3.2.1 Numbering of decks should be consistent with and should reflect the numbering in the ship's safety plans. The deck numbers should be prominently displayed at stair landings and lift lobbies. Decks may also be named, but the deck number should always be displayed with the name. See [Figure A.3](#).

It is recommended that all decks be sequentially numbered, e.g. starting with "1" at the tank top or lowest deck and then upwards; or with "1" at the bulkhead deck and upwards, and from it downwards. In this latter case, the decks below the bulkhead deck may be identified by negative numbers (e.g. -1, -2, -3, etc.) or by letters (e.g. A, B, C, etc.), again from top to bottom.

4.3.2.2 All embarkation stations for the survival craft, and the relevant survival craft, should be sequentially numbered from fore to aft. Odd numbers should be used for the starboard side and even numbers for the port side.

4.3.2.3 All assembly stations should be sequentially lettered, starting with "A", from fore to aft. In case they are located on the same deck but on both sides of the ship, then they should be sequentially lettered from starboard side to port side. Should an assembly station span more than one deck, then the notation may be by assembly station letter and deck number, e.g. A3, A4, and A5 for the assembly station A spanning on decks 3, 4, and 5. Should assembly stations be located on more than one deck, then they should be lettered from bottom to top.

4.4 Marking of means of escape

4.4.1 Exit doors and hatches from machinery spaces, service spaces, normally manned control stations, and accommodation spaces that lead to escape routes should be clearly marked by the exit sign. This requirement may not apply to normally unmanned spaces of less than 15 m², to cabins (except for multi-room cabins), and to spaces where the location of the exit door is self-evident under emergency lighting conditions. Intermediate doors in escape routes should be clearly marked with escape route signs supplemented by directional arrows. See [Figure A.1](#).

4.4.2 Assembly station directional signs should be provided along escape routes such as stairways, corridors, and entrance halls and on outside decks in the vicinity of doors giving access to assembly stations or to the routes to the assembly stations in consistency with the approved means of escape plan. The assembly station directional sign should consist of the assembly station symbol with appropriate directional arrow in accordance with ISO 24409-2, MSE001. In case more than one assembly station is provided on the ship or marine installation, at the deck level of an assembly station, the assembly station directional signs should be supplemented by the relevant identification letter. See [Figures A.1, A.3, and A.13](#).

4.4.3 In passenger ships, assembly station directional signs should be provided along the escape routes identified on the escape plan, which give access to the enclosed stairways providing continuous fire shelter from the level of their origin to the embarkation deck or assembly station, as applicable. Moreover, such signs should also be provided at each landing of the stairways in order to indicate the direction of escape. See [Figure A.3](#).

4.5 Marking of assembly stations and embarkation stations

4.5.1 Access to assembly stations should be identified by the assembly station directional sign with the appropriate identification letter. The sign should be placed above or by the access door.

4.5.2 A space designated as an assembly station should be marked with the assembly station sign and the appropriate identification letter (see [Figures A.4](#) and [A.5](#)).

4.5.3 When the assembly station is in a different location than the embarkation station, the signing system should clearly indicate the direction and egress route from the assembly station to the designated areas where the survival craft are boarded by the use of the appropriate survival craft directional signs, as specified in ISO 24409-2 (i.e. by lifeboat LSS001, davit-launched liferaft LSS004, evacuation slide LSS019, or evacuation chute LSS020, with supplementary arrow to give directional information) and as applicable to the ship or marine installation. See [Figure A.6](#).

4.5.4 A space designated as an embarkation station should be marked with the appropriate sign for the type of survival craft at the station and the appropriate identification number. See [Figure A.5](#).

4.5.5 The signs should be of sufficient size and quantity to be visible from any access to the assembly station, or survival craft embarkation station, and located so as not to be obscured by persons or other obstructions in the area.

NOTE Illustrative examples of the use of assembly station and embarkation station signs to mark escape routes may be found in informative [Annex A](#).

4.6 Location of escape route signs

4.6.1 Escape route signs should take precedence over all other signs in the same area. Signs with a potentially conflicting message (e.g. "NO THOROUGHFARE") should not be used in the same location. Where this conflict is unavoidable, a supplementary text sign (e.g. "EXCEPT IN AN EMERGENCY") should be provided to override the prohibition message. The effectiveness of any safety sign should not be adversely affected by other signs, by the presence of other signs conveying information in a similar format, or by competing or distracting light sources.

4.6.2 In general, and whenever possible, the exit signs specified in [4.4.1](#) should be fitted over the door and should be visible from any foot traffic area within rooms and enclosures. Further exit signs, supplemented by appropriate directional arrows, should be provided throughout large spaces to identify the direction of travel towards the exit doors (which are part of the means of escape to assembly stations or embarkation stations identified on the means of escape plan) and should be referred at [4.4.2](#) and [4.4.3](#) when the viewing distance between the observation point within the traffic area and the exit is more than 15 m. See [Figure A.13](#).

4.6.3 In general, the escape route signs mentioned in [4.4.2](#) and [4.4.3](#) should be fitted above or by the exit doors which are part of the means of escape identified on the escape plan to the designated assembly station or embarkation station, as applicable.

4.6.4 Where an escape route involves a change of direction or level that presents a person with a choice of directions, an escape route sign with the appropriate supplementary arrow should be provided to indicate the direction of travel. See [Figures A.3](#) and [A.13](#).

4.6.5 So far as is reasonably practicable, signs should be evenly spaced and consistently located so that the evacuee can effectively and quickly predict the location of the next sign along the escape route. Additional signs should be provided where the line of sight to the next sign would otherwise exceed 15 m.

4.6.6 Where commercial or artistic considerations require signs or objects which, because of their size, brightness, design, or proximity, might be confused with or prevent recognition of an escape route sign, the location of the escape route sign may be slightly displaced provided safety is not compromised thereby. Otherwise, the conflicting signs or objects should be removed.

NOTE Illustrative examples of the use of exit signs and directional signs to mark escape routes may be found in informative [Annex A](#).

4.7 Use of directional arrows

4.7.1 Escape route signs for the directional movement of evacuees should incorporate or be accompanied by appropriate directional arrows complying with ISO 24409-1 to assist with the understanding of the direction of escape and make the signs more conspicuous. The arrows should uniquely indicate the direction of travel leading to exits, assembly stations, or embarkation stations and should never be used except in conjunction with safety signs.

4.7.2 Each change of direction or change of level that presents a person with a choice of directions should be indicated by the use of arrows, as specified in [4.6.4](#).

4.7.3 Supplementary directional arrows should be provided wherever additional escape route signs are to be provided in accordance with [4.6.2](#), i.e. where the line of sight to the next sign would otherwise exceed the recommended maximum viewing distance for the chosen size of sign.

4.8 Mounting height

4.8.1 Escape route signs should be mounted at heights so as to be conspicuous within the normal field of vision. Signs above doors of large spaces should be sited as close to the centre line of the escape route as practicable and should be mounted between 2,0 m and 2,5 m from deck level, measured to the base of the sign, to ensure that the means of escape can be readily seen, e.g. over the heads of people. Directional signs sited on bulkheads should be mounted between 1,5 m and 2,0 m from deck level, measured to the base of the sign, to ensure the signs are within the immediate field of vision, as far as practicable.

4.8.2 Mounting heights greater than 2,5 m may be used, e.g. in large public spaces where the height of the ceiling does not permit such installation, but care should be taken to ensure that such signs are both conspicuous and legible. Larger signs may therefore be necessary in such cases.

4.8.3 So far as is reasonably practicable, similar escape route signs should be sited at the same height throughout the escape route to assist the evacuee in predicting the location of successive signs.

4.9 Mimic signs

4.9.1 On a passenger ship, mimic signs, as defined in ISO 24409-1, should be prominently displayed, as far as practicable, in or at the entrance of conspicuous passenger public spaces, within or close to passenger stairway enclosures, and at assembly stations in case they are internally located. Mimic signs in public spaces should be kept well clear of other (non-safety) signs and posters; moreover, the floor area in way of their location should be free of any obstruction (e.g. tables, chairs, plants), so as to permit their reading, and should be clear of passageways. As far as practicable, mimic signs should be properly oriented in relation to their position on the ship and should indicate, by the use of arrows, the exit doors which are part of the means of escape identified by the means of escape plan. Wording on the mimic sign should be in language(s) appropriate to the nationalities carried on the ship, and for international voyages, also in English.

4.9.2 On a passenger ship, inside each passenger cabin, a mimic sign should be installed on the interior side of the entrance door. In addition to the information specified in [4.9.1](#), this mimic sign should

- a) explain the low-location lighting system and the design and meaning of escape signs, and
- b) inform the occupants on the assembly station assigned to them (i.e. identification letter and room name of the space), its location, and the two main escape routes to it.

4.10 Marking of means of escape for mobility impaired people

4.10.1 On passenger ships, when the escape routes to assembly stations or embarkation stations are not accessible to mobility impaired people, the alternative accessible route, if any, should be identified and marked by the escape route directional signs supplemented by the appropriate sign with the international symbol for accessibility in accordance with ISO 7001.

5 Fire-fighting equipment and life-saving appliances signing system

5.1 The locations of fixed and portable fire-fighting equipment and life-saving appliances should be clearly and prominently marked using the appropriate signs as specified in ISO 24409-2, located at or near the equipment, at a height appropriate to the location of the equipment. Signing of fire-fighting equipment to comply with ISO 15370 should not be considered sufficient to comply with the above prescription. See [Figures A.3, A.5, A.7 to A.11](#), and [A.14](#).

5.2 The use of arrows for signing the location of fire equipment should be avoided as much as possible except when the fire equipment and relevant identification sign are not visible from traffic areas within a space. In this latter case, additional safety signs supplemented by appropriate directional arrows should be provided to indicate the direction in which the equipment is located. See [Figure A.2](#).

6 Fire control plan signing system

6.1 The location of the fire-fighting devices and systems, identified on the fire control plan and provided on the ship or marine installation in accordance with applicable rules and regulation, should be marked on-board using the appropriate sign in consistency with the symbols shown on the above-mentioned fire control plan, as specified in ISO 24409-2. See [Figure A.12](#).

6.2 The signs should be located at the device or control; in case the device or control is under a removable panel or is accessible by a door or hatch, then the sign should be repeated on the panel, door, or hatch, so that the location of the device or control is clearly identifiable (e.g. fire dampers and relevant controls, sprinkler section valves). In case the device or system control is the only one behind the panel, door, or hatch, the sign at the device or control may be avoided but the one in view, i.e. on the panel, door, or hatch, should be maintained (e.g. International shore connection SIS 025, Emergency switchboard SIS 050, Emergency generator SIS 048). See [Figures A.2](#) and [A.7](#).

6.3 To increase comprehension, the fire control plan signs should always be supplemented by the relevant text with the description of the device or system control and by relevant identification number, if any. The supplementary text is not needed in case the fire control plan signs are supplemented by manuals, instruction, and training.

6.4 When an arrangement is self-evident following the applicable safety regulations or the characteristics of the ship or marine installation, the use of the fire control plan signs may be simplified if they are supplemented by manuals, instruction, and training, e.g.:

- SIS 034 “Fire hydrant” sign may not be used when fire hoses are permanently connected to relevant hydrants; in this case, only FES002 “Fire hose” sign should be used for each hydrant/hose station;
- SIS 042 “Space or group of spaces protected by water fire extinguishing system” may not be used (for each protected space) if the ship or marine installation is fully or almost fully protected by such a system.

6.5 Signs which identify systems, devices, or equipment (e.g. emergency generator, emergency source of electrical power (battery), air compressor for breathing devices, etc.) may be fitted only on the door to access the space where the system, device, or equipment is fitted, and not inside or at the system.

7 Illumination and photometric properties of phosphorescent signs

Phosphorescent signs should be selected so as to ensure that under the ambient lighting conditions in the area where they are mounted, they will meet the luminance decay properties required by ISO 24409-1. At the same time, ship designers should take into account the need to energize phosphorescent materials in designing lighting systems for areas where phosphorescent signs are likely to be used.

NOTE Some types of light sources, e.g. low pressure sodium or some halogen lights, do not enable effective colour recognition nor activate phosphorescent signs adequately and are therefore unlikely to be suitable for the illumination of escape route signs, fire fighting signs, and life-saving appliance signs.

8 Sign size and viewing distance

8.1 Signs should be sized so as to be legible at the anticipated viewing distance. In no case should the dimensions of the safety signs be less than those required for a viewing distance of 1 m under normal lighting conditions, as far as practicable. Guidance on the size of safety signs relative to observation distance is given in ISO 3864-1, Annex A.

8.2 Any variation of the sizes of similar types of signs within a ship should be kept to a minimum.

9 Installation of signs

9.1 Signs should be installed in a manner suitable to their construction. The installation means should be sufficiently durable that the signs cannot be easily or accidentally removed or deformed in such a way that their legibility is adversely affected.

9.2 Safety signs should be tested for durability in accordance with the performance classifications in ISO 17398.

10 Documentation of safety signing system

10.1 Documentation of the installed signing system should be prepared and maintained on-board for use in training and maintenance.

10.2 The documentation should include the following:

- a) as-built signing plan: the plan should be kept updated as necessary to reflect any changes made to the signing system after initial installation; the information required should be provided deck by deck, with names of all internal spaces and cabin numbering; details/scale of the plan should provide enough information to indicate the correct placement of the signs (e.g. centred on doors, height of installation, above the deck);
- b) list of all safety signs installed on board: the list should include, for each sign, the reference code or identification number and the main characteristics (e.g. dimensions, material, colour, text or symbol, use, and typical installation);
- c) supplier identification: the reference should include the name, address, contacts, and possible certification to appropriate standards, as required by the ship contract or competent authority;
- d) maintenance, cleaning, and replacement of signs log: the log should include the correct actions for the maintenance of signs, how and when the signs are to be replaced (i.e. instructions to the crew)

to indicate when the signs are to be replaced due to fading, wear, cracking, obscured, dirty, etc.), checking of installation, and effectiveness of signs; records of any changes or modifications to any installed/removed safety sign.

NOTE Additional guidance may be found in ISO 16069.

11 Inspection and maintenance of signs

11.1 Safety signs should be visually inspected and cleaned at regular intervals and action should be taken to remedy any defects, in accordance with the documentation provided under [Clause 10](#).

11.2 If the ship is modified, or the use of the ship changes, or if any of the design considerations for the signing system change significantly, the signing system should be reviewed and modified as necessary.

Annex A (informative)

Illustrative examples of signing applications



















Meaning as viewed from in front of the sign	Escape route signs to exit	Escape route signs to assembly station	Escape route signs to embarkation station
1. Progress down to the right (indicating change of level).			
1. Progress up to the right (indicating change of level). 2. Progress forward and across to the right from here when suspended within an open area			
1. Progress down to the left (indicating change of level).			
1. Progress up to the left (indicating change of level). 2. Progress forward and across to the left from here when suspended within an open area.			
1. Progress forward from here (indicating change of travel). 2. Progress forward and through from here when sign is sited above door (indicating change of travel). 3. Progress forward and up from here (indicating change of level).			
1. Progress to the right from here (indicating direction of travel).			

Figure A.1 — (continued)







1. Progress to the left from here (indicating direction of travel).			
1. Progress down from here (indicating direction of travel).			

Figure A.1 — Examples of escape route signs or directional indicators to be used with or without a supplementary sign with text



Figure A.2



Figure A.3



Figure A.4



Figure A.5



Figure A.6



Figure A.7



Figure A.8



Figure A.9

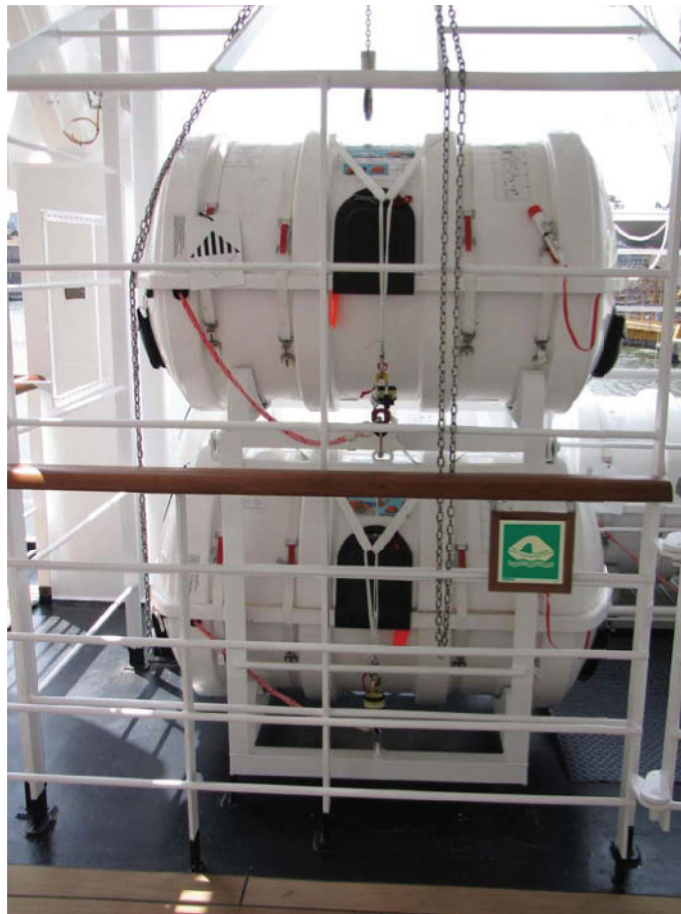


Figure A.10



Figure A.11



Figure A.12



Figure A.13



Figure A.14

Bibliography

- [1] ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*
- [2] ISO 7001, *Graphical symbols — Public information symbols*
- [3] ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs*
- [4] ISO 16069, *Graphical symbols — Safety signs — Safety way guidance systems (SWGS)*
- [5] IMO Resolution A.752(18) *Guidelines for the evaluation, testing and application of low-location lighting on passenger ships*

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