
**Ships and marine technology —
Shipboard plans for fire control,
damage control, life-saving appliances
and means of escape**

*Navires et technologie maritime — Plans de sécurité à bord du navire,
des moyens de lutte contre l'incendie, des engins de sauvetage et des
moyens d'évacuation*

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Preparation of plans	3
4.1 General.....	3
4.2 Fire control plan.....	5
4.3 Structural fire-protection plan.....	5
4.4 Means of escape plan.....	5
4.5 Lifesaving appliances plan.....	5
4.6 Damage control plan.....	6
5 Documentation requirements	6
5.1 Availability of plans on board ship.....	6
5.2 Distribution of booklets.....	7
5.3 Computer-based systems.....	7
5.4 Updating requirements.....	7
5.5 Accessibility of fire control plans for shoreside fire-fighting personnel.....	7
Annex A (normative) Graphical symbols for use in plans	11
Annex B (informative) Standard colours and equivalent colour codes	27
Bibliography	28

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).

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 www.iso.org/patents).

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

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 1, *Maritime safety*.

This second edition cancels and replaces the first edition (ISO 17631:2002), which has been technically revised. It also incorporates the amendment ISO 17631:2002/Amd 1:2010 and the Technical Corrigendum ISO 17631:2002/Cor 1:2002.

The main changes are as follows:

- symbols have been revised to bring them in accordance with IMO A.1116 (30)^[9] and ISO 24409-2;
- information for damage control plans have been added;
- bibliography updated and normative reference added.

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

Introduction

This document has been developed taking into account the existing International Maritime Organization (IMO) guidance on the subject as listed in the bibliography. It is intended to supplement IMO requirements and recommendations for arrangement of shipboard plans used on commercial vessels complying with the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended.

The symbols in [Annex A](#) generally conform to the corresponding symbols given in IMO Resolutions A.952 (23) [8] and A.1116 (30) [9], but, as far as the symbols for fire control plans are concerned, it was deemed necessary to carry out the following changes:

- a) with the aim of rendering them more comprehensible to people on board and to shoreside fire-fighting personnel, who may be called to operate onboard, a small number of symbols [e.g. emergency equipment, muster and embarkation stations contained in IMO Resolution A.760 (18) [7] or IMO Resolution A.952 (23)] have been modified in order to harmonize them with ISO 24409-2 and with ISO 7010; and
- b) damage control plan symbols have been introduced.

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Ships and marine technology — Shipboard plans for fire control, damage control, life-saving appliances and means of escape

1 Scope

This document specifies the content, type, design, layout and usage of shipboard and marine installation plans made available and displayed for fire control appliances and arrangements, damage control, lifesaving appliances and arrangements, and means of escape. It also specifies graphical symbols and illustrations used in such plans.

It does not include signs and mimic signs that provide instructions for safe escape for general safety information.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

3 Terms and definitions

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

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

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

3.1

booklet

compilation of shipboard plans

3.2

bulkhead deck

uppermost deck up to which the main bulkheads and the ship's shell are carried watertight

3.3

competent authority

administration whose flag the ship is entitled to fly, or an organization authorized by an Administration, to perform functions required by this document

3.4

cross-flooding device

equalization device

combination of ducts and pipes installed on ships to give means of equalization of the water in case of asymmetric damage condition

3.5

damage control plan

plan for the guidance of the officers in charge of the ship, showing the boundaries of the watertight compartments, the openings therein with relevant means of closure and position of any controls thereof, and the arrangements for the correction of any list due to flooding

Note 1 to entry: It is specified in SOLAS 74 (as amended), Chapter II-1.

3.6

escape plan

plan displaying general safety information of a ship, illustrating the escape routes and relevant means of escape and assembly stations

3.7

fire locker

locker containing fire-fighter outfits, portable fire-fighting equipment and relevant spare parts

3.8

fire control plan

plan, plans, or booklets containing information on fire-protection appliances and structural fire protection, for the guidance of the officer in charge of the ship and the firefighting team

Note 1 to entry: It is specified in SOLAS 74 (as amended), Chapter II-2.

3.9

fire-protection appliance

fixed fire-fighting system and portable equipment for use or activation in case of fire

Note 1 to entry: It is specified in SOLAS 74 (as amended), Chapter II-2.

3.10

graphical symbol

visually perceptible figure which is used for the purpose of transmitting information independent of the medium of language

3.11

illustration

use of line drawings for the depiction of a vessel's general arrangement

3.12

lifesaving appliance

system or appliance serving the purpose of saving the life of any person, in an emergency at sea when the ship must be abandoned or persons at sea must be rescued

Note 1 to entry: Lifesaving appliances are addressed by SOLAS 74 (as amended), Chapter III.

3.13

main vertical zone

MVZ

sections in which the hull, superstructures and deckhouses are divided by "A" class divisions

Note 1 to entry: MVZ characteristics are specified in SOLAS 74 (as amended), Chapter II-2.

3.14

means of escape

routes and additional aids so that persons on-board can safely and swiftly escape to the lifeboat and liferaft embarkation deck

3.15**mimic sign**

sign which indicates the “you are here” position and incorporates a safety notice listing appropriate actions to be taken in an emergency

Note 1 to entry: “Mimic sign” has the same meaning as “simple mimic plan” also referred to in SOLAS regulation II-2/13.7.2.2; the cabin placard referred to in IMO Resolution A.752 (18); and the emergency instruction notices described by IMO MSC/Circ.699.

3.16**primary escape route**

safest and protected route to the assembly station

Note 1 to entry: It complies with SOLAS 74, regulation II-2/13.

3.17**secondary escape route**

alternate means of escape for use in cases where the *primary escape route* (3.16) is not available due to fire, smoke or flooding conditions

3.18**storm cover for windows**

protective cover for ship's windows for use in case of extreme weather or sea conditions

3.19**structural fire protection**

passive fire protection, including details of the fire divisions of the ship

3.20**watertight**

capability of preventing the passage of water through the structure, in any direction, under the head of water likely to occur in intact and damaged conditions

3.21**watertight appliance**

appliance having watertight characteristics to prevent the passage of water into the spaces or units

3.22**weather-deck**

uppermost continuous deck exposed to the weather

3.23**weather-tight appliance**

appliance designed to prevent the penetration of water into the ship in any sea conditions

4 Preparation of plans**4.1 General**

4.1.1 The structure and execution of the plans is the result of a thorough evaluation of the regulatory compliance requirements, as well as an assessment of the relevant facilities for fire control, damage control, escape and embarkation on lifesaving appliances.

4.1.2 The number and types of plans to be carried on board a particular ship must meet the requirements of the competent authority.

4.1.3 In general, except for damage control plans, no illustration in any plan shall be made to a scale smaller than 1:200 with minimum line point size of 4,5 for main vertical zone divisions, 2,25 for A and B class and watertight divisions, and 0,75 for other lines. Large plans may be subdivided for clarity.

Damage control plans should be of a scale adequate to the size of the ship, or marine installation, in order to clearly show the required content of the plan; in general, the plan shall not be made to a scale smaller than 1:400.

4.1.4 The plans shall be in colour, and the detail of the symbols shall be clear.

4.1.5 Fire, lifesaving and damage control information should be placed in separate plans. However, depending on the quantity of information to be taken into account for presentation, more than one particular plan may be combined or consolidated, under the judgement of the competent authority, provided that the combined or consolidated plans are properly legible. In addition, consideration may be given to drawing up separate fire control plans for machinery spaces and deck areas.

4.1.6 A legend of symbols and explanations shall be a constituent part of any plan and contain a complete list of the graphical symbols used in the plan, together with the appropriate explanations, and may include, in some instances, additional special information such as the type of extinguishing media used in the fixed fire-extinguishing system(s). As a rule, the legend shall be inserted in the appropriate drawing. In case of a loose equipment – such as fire extinguishers, lifebuoys, or lifejackets – the legend shall indicate next to each symbol the quantity of each particular item and, if needed, the arrangement provided. For clarity, preferably only one font type should be used for text in plans. The minimum letter point size shall be 12. The legend should preferably be placed at the right-hand side of the plan.

4.1.7 The information required shall be shown deck by deck; names of internal and external spaces and cabin numbering shall also be shown.

4.1.8 The graphical symbols shown in [Annex A](#) shall be used when developing the plans. [Table B.1](#) may be used for definitions of colour. A summary of all symbols included in [Annex A](#) is given in [Table 1](#). The graphical symbols used in plans and booklets shall be of suitable size to ensure that they remain clear and recognizable, and shall not be smaller than 7 mm by 7 mm. Generally, symbols within the drawing should not have a defining border. All symbols shall be positioned on plans in a manner to clearly indicate the location on the vessel, but to avoid clutter, symbols may be placed outside the plan with a dot and line to indicate the actual position. In this case, the graphical symbols shall have the defined border, and the line shall have a point size greater than the minimum line point size adopted for the general arrangement plan.

4.1.9 Plans, including those consolidated in the form of a booklet, shall contain the following additional particulars:

- a) ship's keel laying date or similar stage of construction, if applicable, as defined in SOLAS 74;
- b) original method (e.g. for cargo ships, IC, IIC, or IIIC, as defined in SOLAS 74, as amended);
- c) additional safety measures, if any;
- d) dates and descriptions of any modifications to the ship which altered her fire, emergency and damage control;
- e) IMO number.

4.1.10 For passenger ship modifications carried out before 1 October 1994, if the dates and descriptions of such modifications are not available, at least the fire safety construction method currently used in the ship shall be stated. Where more than one method or a combination of methods is used in different locations of the ship, this shall be specified.

4.1.11 Text in plans and booklets must be in the language or languages required by the competent authority. Where more than one language is used on plans, these separate languages shall be indicated with different font types. The languages used should take into account the requirements of the IMO ISM Code^[6] with regard to the working languages of the ship.

4.1.12 In order to improve legibility, the plans should not include information that is not directly relevant to their scope and purpose.

4.2 Fire control plan

4.2.1 The plan shall show the arrangement of the structural fire protection boundaries as per A.1, and arrangement and location of fire-protection appliances as per A.2, together with means of access to compartments, decks, etc.

4.2.2 The content of each fire locker shall be indicated in the legend. Symbols of items contained in a fire locker need not be indicated on the deck views of the plan.

4.3 Structural fire-protection plan

The plan shall show the arrangement and location of the structural fire-protection details given in [Annex A](#), symbols A.1.1 to A.1.11.

4.4 Means of escape plan

The plan shall show each means of escape within the ship, and identify assembly and embarkation stations. Primary and secondary escape routes, as applicable, shall be identified in the plan by arrows as indicated in [Figures 1](#) and [2](#).



Figure 1 — Arrow for indicating the primary escape route



Figure 2 — Arrow for indicating the secondary escape route

NOTE 1 For means of escape on passenger ships, reference can be made to IMO resolution A.757(18)^[8] and FSS Code chapter 13^[12].

NOTE 2 For the use of escape signs, see ISO 24409-2.

4.5 Lifesaving appliances plan

4.5.1 The plan shall show the arrangement and location of the items given in [Annex A](#), symbols A.3.1, A.3.2 and A.4.1 to A.4.34. In addition, the plan shall indicate the quantity of each particular item of lifesaving appliances and arrangements provided, and the capacity of each assembly station. The number and capacity of collective lifesaving appliance at each stowage position shall be indicated in the legend or at the bottom of the appropriate symbol.

4.5.2 Where lifejackets are located in cabins, this shall be clearly indicated on the plan.

4.5.3 Locations of all assembly stations and embarkation stations shall be clearly indicated on the plan.

4.6 Damage control plan

4.6.1 The plan is intended to provide clear and easy to understand information on the ship's watertight subdivision and equipment related to maintaining the boundaries and effectiveness of the subdivision. In the event of damage to the ship causing flooding, proper precautions can be taken to prevent progressive flooding through openings therein. Effective action can also be taken quickly to mitigate and, where possible, recover the ship's loss of stability.

4.6.2 The plan shall include tables in which the actions that must be done to seal any watertight compartment are clearly indicated.

4.6.3 The information required shall be shown deck-by-deck; where relevant equipment is located on other decks, the plan shall show appropriate sections of these decks within the drawing.

4.6.4 The plan should include a longitudinal section of the ship, plan views of each deck considered by the damage control arrangements and transverse sections in order to show:

- the watertight boundaries of the ship;
- any mechanical means to correct list due to flooding;
- all internal watertight appliances including, on ro-ro ships, internal ramps or doors acting as extension of the collision bulkhead and their controls and the locations of their local and remote controls, position indicators and alarms. The locations of those watertight closing appliances which are not allowed to be opened during the navigation and of those watertight appliances which are allowed to be opened during the navigation should be clearly indicated;
- the locations of all shell doors, including position indicators, leakage detection and surveillance devices;
- the locations of all weather-tight appliances in local subdivision boundaries above the bulkhead deck and on the lowest exposed weather decks, together with locations of controls and position indicators, if applicable;
- the locations of all bilge and ballast pumps, their control positions and associated valves;
- the indication of compartments and decks;
- indicate whether an access point represents both up and down or only way transit (at the bottom of the stair or ladder);
- the indication of all hatches;
- any other relevant pumps and valves referred to the damage control booklet.

4.6.5 All stairs, ladders, watertight doors and hatches for access to, or escape from, each watertight compartment should be clearly marked and identified by the compartment number and stair number as shown in A.5.2 to A.5.4.

5 Documentation requirements

5.1 Availability of plans on board ship

The plans drawn up in accordance with the provisions of [4.2](#) to [4.6](#), which may also take the form of a combined or consolidated plan as referred to in [4.1.5](#), shall be kept readily available for the information of the ship's officers.

In addition, as a minimum, the fire control plan, lifesaving plan and damage control plan shall be permanently exhibited or readily available at or near the navigation bridge, as well as in the ship's central control station, safety centre, cargo control room or equivalent and at the officers' mess or recreational area.

5.2 Distribution of booklets

If the fire control plan, lifesaving plan or the damage control plan is in the form of a booklet, this shall be provided to each officer with defined duties for fire emergencies, damage control or evacuation.

5.3 Computer-based systems

Computer-based systems shall comply, at a minimum, with the substantive contents of this document. However, computer-based systems may not replace the plans referred to in this document.

5.4 Updating requirements

Plans and booklets shall be kept up to date. Alterations shall be recorded on the plans or, in the case of a booklet, contained on a separate page for revisions.

5.5 Accessibility of fire control plans for shoreside fire-fighting personnel

5.5.1 In addition to the permanently displayed fire control plan specified in 5.1, in all vessels, a duplicate set of the fire control plan or of the booklet containing such a plan shall be permanently stored in a prominently marked weather-tight enclosure outside the deckhouse for the assistance of shoreside fire-fighting personnel.

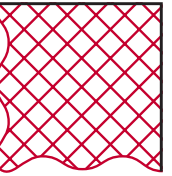
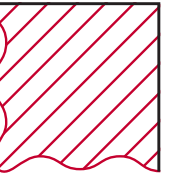
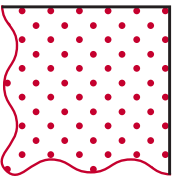
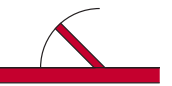
5.5.2 In oil tankers, chemical tankers, and gas carriers, the fire control plans shall not be located on exterior boundaries of superstructures which face cargo tanks or on the surfaces within 3 m from them along the side.

5.5.3 The enclosure shall be capable of being easily opened and be located in a well-illuminated position, if possible from an emergency source. In addition, the fire control plan shall be properly protected against the marine environment.

NOTE For the marking of the enclosure on board, reference can be made to IMO MSC/Circular 451^[6].

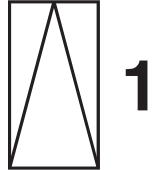
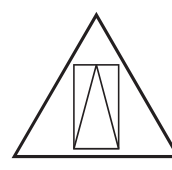
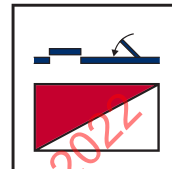
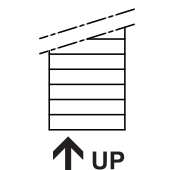
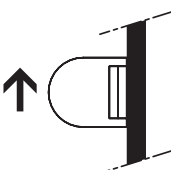
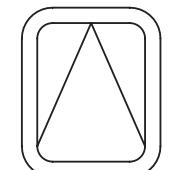
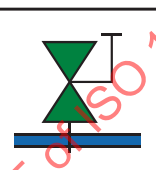
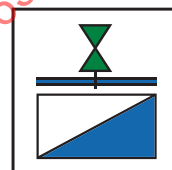
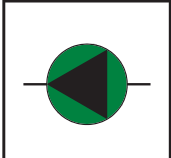
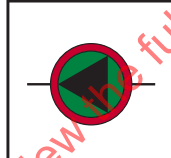
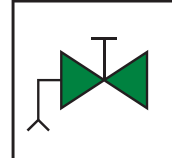
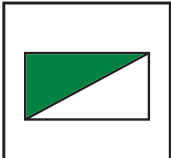
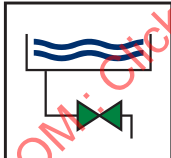
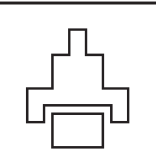
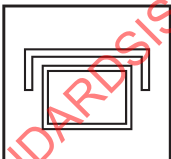
Table 1 — Summary of graphical symbols for use in plans

NOTE For information on the border lines, see 4.1.8.

A.1.1.0 	A.1.1.1 	A.1.1.2 	A.1.1.3 	A.1.1.4 	A.1.1.5 
A.1.1.6 	A.1.1.7 	A.1.2.0 	A.1.2.1 	A.1.3 	A.1.4 

A.1.5 	A.1.6 	A.1.7 	A.1.8 	A.1.9 	A.1.10
A.1.11 	A.1.12 	A.1.13 	A.1.14 	A.1.15 	A.1.16
A.1.17 	A.1.18 	A.2.1 	A.2.2 	A.2.3 	A.2.4
A.2.5 	A.2.6 	A.2.7 	A.2.8 	A.2.9 	A.2.10
A.2.11 	A.2.12 	A.2.13 	A.2.14 	A.2.15 	A.2.16
A.2.17 	A.2.18 	A.2.19 	A.2.20 	A.2.21 	A.2.22
A.2.23 	A.2.24 	A.2.25 	A.2.26 	A.2.27 	A.2.28
A.2.29 	A.2.30 	A.2.31 	A.2.32 	A.2.33 	A.2.34
A.2.35 	A.2.36 	A.2.37 	A.2.38 	A.2.39 	A.2.40

A.2.41	A.2.42	A.2.43	A.2.44	A.2.45	A.2.46
A.3.1	A.3.2	A.4.1	A.4.2	A.4.3	A.4.4
A.4.5	A.4.6	A.4.7	A.4.8	A.4.9	A.4.10
A.4.11	A.4.12	A.4.13 (left empty)	A.4.14	A.4.15	A.4.16
A.4.17	A.4.18	A.4.19	A.4.20	A.4.21	A.4.22
A.4.23	A.4.24	A.4.25	A.4.26	A.4.27	A.4.28
A.4.29	A.4.30	A.4.31	A.4.32	A.4.33	A.4.34
A.4.35	A.4.36	A.4.37	A.4.38	A.4.39	A.4.40

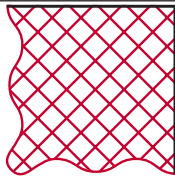
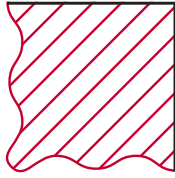
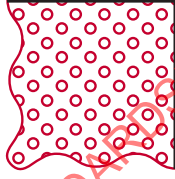
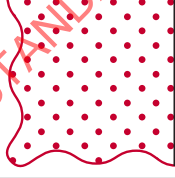
A.5.1 	A.5.2 	A.5.3 	A.5.4 	A.5.5 	A.5.6 
A.5.7 	A.5.8 	A.5.9 	A.5.10 	A.5.11 	A.5.12 
A.5.13 	A.5.14 	A.5.15 	A.5.16 	A.5.17 	A.5.18 
A.5.19 	A.5.20 	A.5.21 	A.5.22 	A.5.23 	A.5.24 
A.5.25 	A.5.26 	A.5.27 	A.5.28 	A.5.29 	A.5.30 (left empty)
A.5.31 	A.5.32 				

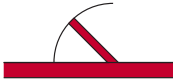
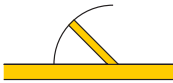
Annex A (normative)

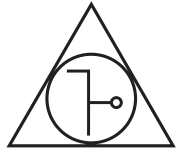
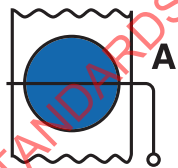
Graphical symbols for use in plans

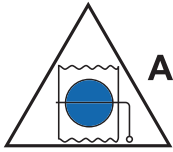
NOTE For information on the border line, see [4.1.8](#).

A.1 Symbols for structural fire-protection

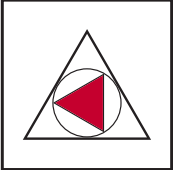
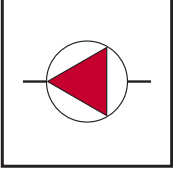
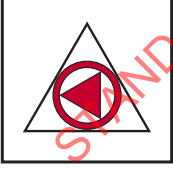
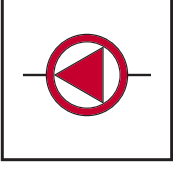
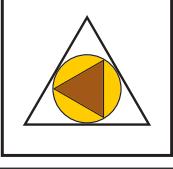
No.	Symbol	Referent	Comments on use
A.1.1.0		A-60 class division bulkhead	
A.1.1.1		A-30 class division bulkhead	
A.1.1.2		A-15 class division bulkhead	
A.1.1.3		A-0 class division bulkhead	
A.1.1.4		A-60 class division deck	To fill the surface of the relevant part of the deck.
A.1.1.5		A-30 class division deck	To fill the surface of the relevant part of the deck.
A.1.1.6		A-15 class division deck	To fill the surface of the relevant part of the deck.
A.1.1.7		A-0 class division deck	To fill the surface of the relevant part of the deck.
A.1.2.0		B-15 class division bulkhead	
A.1.2.1		B-0 class division bulkhead	
A.1.3		Main vertical zone division	

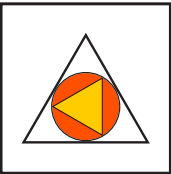
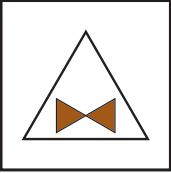
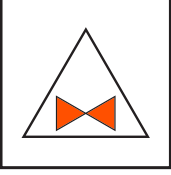
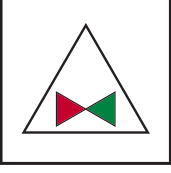
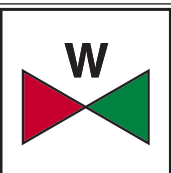
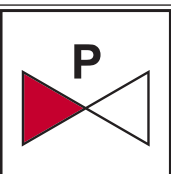
No.	Symbol	Referent	Comments on use
A.1.4		A-class hinged fire door	The symbol should be at the door position and should show the actual opening direction of the door leaf. Add WT to the right side of the symbol in the case of a watertight door. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add A-60, A-30, A-15 or A-0 for fire rating classification of the door.
A.1.5		B-class hinged fire door	The symbol should be at the door position and should show the actual opening direction of the door leaf. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add B-15 or B-0 for fire rating classification of the door.
A.1.6		A-class hinged self-closing fire door	The symbol should be at the door position and should show the actual opening direction of the door leaf. Add WT to the right side of the symbol in the case of a watertight door. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add A-60, A-30, A-15 or A-0 for fire rating classification of the door.
A.1.7		B-class hinged self-closing fire door	The symbol should be at the door position and should show the actual opening direction of the door leaf. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add B-15 or B-0 for fire rating classification of the door.
A.1.8		A-class sliding fire door	The symbol should be at the door position and should show the actual direction of the door. Add WT to the right side of the symbol in the case of a watertight door. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add A-60, A-30, A-15 or A-0 for fire rating classification of the door.
A.1.9		B-class sliding fire door	The symbol should be at the door position and should show the actual direction of the door. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add B-15 or B-0 for fire rating classification of the door.

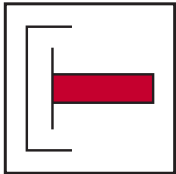
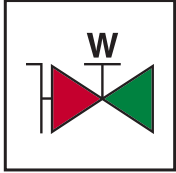
No.	Symbol	Referent	Comments on use
A.1.10		A-class self-closing sliding fire door	The symbol should be at the door position and should show the actual direction of the door. Add WT to the right side of the symbol in the case of a watertight door. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add A-60, A-30, A-15 or A-0 for fire rating classification of the door.
A.1.11		B-class self-closing sliding fire door	The symbol should be at the door position and should show the actual direction of the door. Add SWT to the right side of the symbol in the case of a semi-watertight door. Add WTH to the right side of the symbol in case of a weather-tight door. Add B-15 or B-0 for fire rating classification of the door.
A.1.12		Remote control for watertight doors or fire doors (ISO 24409-2: SIS009, ISO 24409-2: SIS008)	Add WT to the right side of the symbol to indicate remote control for watertight doors or FD to indicate remote control for fire doors.
A.1.13		Ventilation remote control or shut-off (ISO 24409-2: SIS004, SIS005, SIS006)	Colour of the circle and a letter at the right side of the symbol should indicate as follows: A = blue for accommodation and service spaces; M = green for machinery spaces; C = yellow for cargo spaces.
A.1.14		Remote control for skylight (ISO 24409-2: SIS007)	
A.1.15		Fire damper (ISO 24409-2: SIS010, SIS011, SIS012)	Colour of the circle and a letter at the right side of the symbol should indicate as follows: A = blue for accommodation and service spaces; M = green for machinery spaces; C = yellow for cargo spaces. Identification number of the damper may be shown at the bottom of the symbol.
A.1.16		Closing device for ventilation inlet or outlet (ISO 24409-2: SIS016, SIS017, SIS018)	Colour of the circle and a letter at the right side of the symbol should indicate as follows: A = blue for accommodation and service spaces; M = green for machinery spaces; C = yellow for cargo spaces. Identification number of the damper may be shown at the bottom of the symbol.

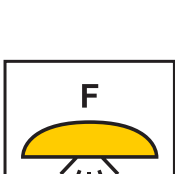
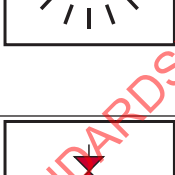
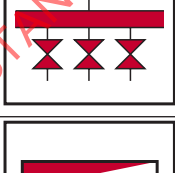
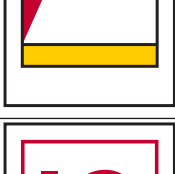
No.	Symbol	Referent	Comments on use
A.1.17		Remote control for fire damper(s) (ISO 24409-2: SIS013, SIS014, SIS015)	Colour of the circle and a letter at the right side of the symbol should indicate as follows: A = blue for accommodation and service spaces; M = green for machinery spaces; C = yellow for cargo spaces. Identification number of the damper may be shown.
A.1.18		Remote control for closing device(s) for ventilation inlet and outlet (ISO 24409-2: SIS019, SIS020, SIS021)	Colour of the circle and a letter at the right side of the symbol should indicate as follows: A = blue for accommodation and service spaces; M = green for machinery spaces; C = yellow for cargo spaces. Identification number of the closing device(s) may be shown.

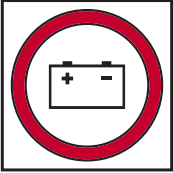
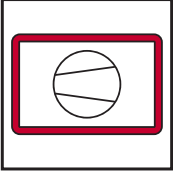
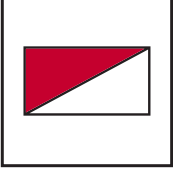
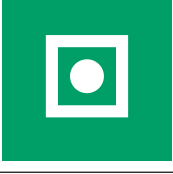
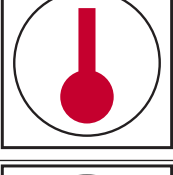
A.2 Symbols for fire-protection appliances

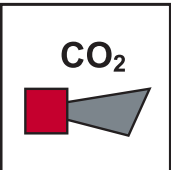
No.	Symbol	Referent	Comments on use
A.2.1		Fire control plan for Fire-protection appliances and structural fire protection (ISO 24409-2: SIS001)	
A.2.2		Remote control for fire pump(s) (ISO 24409-2: SIS022)	
A.2.3		Fire pump (ISO 24409-2: SIS023)	The type, quantity of water delivered per time unit, and pressure head shall be indicated either at the right side of the symbol or in the legend.
A.2.4		Emergency fire pump remote control (ISO 24409-2: SIS024)	
A.2.5		Emergency fire pump (ISO 24409-2: SIS025)	The type, quantity of water delivered per time unit, and pressure head shall be indicated either at the right side of the symbol or in the legend.
A.2.6		Fuel pump remote shut-off (ISO 24409-2: SIS026)	

No.	Symbol	Referent	Comments on use
A.2.7		Lube oil pump remote shut-off (ISO 24409-2: SIS027)	
A.2.8		Remote control for fuel oil valve (ISO 24409-2: SIS030)	
A.2.9		Remote control for lube oil valve (ISO 24409-2: SIS031)	
A.2.10		Remote control for fire pump valve (ISO 24409-2: SIS032)	
A.2.11		Remote release station (ISO 7010-F014, ISO 24409-2: FES011)	Indicate at the bottom of the symbol the protected space. Extinguishing media should be colour-coded in the lower part of the symbol and be indicated by a letter at the right side of the symbol as follows: grey — CO₂ for carbon dioxide or N for nitrogen, brown — for gasses other than CO ₂ or Nitrogen such as Halon, Aerosols, Novec (type of gas to be indicated), white — P for powder, green — W for water.
A.2.12		Fire main section valve (ISO 24409-2: SIS035)	Indicate the reference number of the valve at the right side of the symbol.
A.2.13		Sprinkler and sprinkler equivalent system section valve (ISO 24409-2: SIS036)	Indicate the reference number of the valve at the right side of the symbol. This symbol may also be applied to equivalent water-extinguishing systems. Valves for automatic dry-pipe sprinkler systems should be indicated in the legend.
A.2.14		Powder-section valve (ISO 24409-2: SIS037)	Indicate the reference number of the valve at the right side of the symbol.
A.2.15		Foam-section valve (ISO 24409-2: SIS038)	Indicate the reference number of the valve at the right side of the symbol.

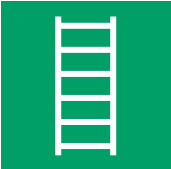
No.	Symbol	Referent	Comments on use
A.2.16		International shore connection (ISO 24409-2: SIS033)	
A.2.17		Fire hydrant (ISO 24409-2: SIS034)	
A.2.18		Unconnected fire hose (ISO 7010-F019)	Indicate the hose length at the right of the symbol; where only one type of hose is used, the information can be shown in the legend.
A.2.19		Fire hose reel (ISO 7010-F002, ISO 24409-2; FES002)	Indicate the hose length at the right of the symbol; where only one type of hose is used, the information can be shown in the legend. Extinguishing media should be colour-coded in the lower part of the symbol and be indicated by a letter on top of the symbol as follows: yellow — F for foam, green — W for water.
A.2.20		Fire extinguisher (ISO 7010-F001, ISO 24409-2; FES001)	Indicate type of extinguishing media [CO₂ for carbon dioxide, F for foam, H for gas other than CO ₂ (type of gas to be indicated), P for powder, W for water] and capacity (kg for gas and powder, litres for water and foam) at the right side of the symbol. Media should be colour-coded in the lower part of the symbol as follows: grey for carbon dioxide, yellow for foam, brown for gas other than CO ₂ , white for powder, green for water.
A.2.21		Wheeled fire extinguisher (ISO 7010-F009, ISO 24409-2; FES006)	Indicate type of extinguishing media [CO₂ for carbon dioxide, F for foam, H for gas other than CO ₂ (type of gas to be indicated), P for powder, W for water] and capacity (kg for gas and powder, litres for water and foam) at the right side of the symbol. Media should be colour-coded in the lower part of the symbol as follows: grey for carbon dioxide, yellow for foam, brown for gas other than CO ₂ , white for powder, green for water.
A.2.22		Portable foam applicator unit (ISO 7010-F010, ISO 24409-2; FES007)	
A.2.23		Water fog applicator (ISO 7010-F011, ISO 24409-2; FES008)	Indicate type of extinguishing media (F for foam, W for water) at the right side of the symbol. Media should be colour-coded in the lower part of the symbol as follows: yellow for foam, green for water.
A.2.24		Fire monitor (ISO 7010-F012, ISO 24409-2; FES012)	Indicate type of extinguishing media (F for foam, P for powder, W for water) at the right side of the symbol. Media should be colour-coded in the lower part of the symbol as follows: yellow for foam, white for powder, green for water.

No.	Symbol	Referent	Comments on use
A.2.25		Collection of firefighting equipment (ISO 7010-F004, ISO 24409-2; FES003)	Indicate the identification number of the fire locker at the right side of the symbol.
A.2.26		Fire blanket (ISO 7010-F016)	
A.2.27	 W	Fixed fire-extinguishing battery (ISO 7010-F008, ISO 24409-2; FES005)	Extinguishing media should be colour-coded in the lower part of the symbol and be indicated by a letter on top of the symbol as follows: grey — CO₂ for carbon dioxide or N for nitrogen, yellow — F for foam, brown — H for gas other than CO ₂ or N (type of gas to be indicated), white — P for powder, green — W for water.
A.2.28	 W	Fixed fire-extinguishing installation (ISO 7010-F012, ISO 24409-2; FES009)	Extinguishing media should be colour-coded in the centre-part of the symbol and be indicated by a letter on top of the symbol as follows: grey — CO₂ for carbon dioxide or N for nitrogen, yellow — F for foam, brown — H for gas other than CO ₂ or N (type of gas to be indicated), white — P for powder, green — W for water.
A.2.29	 W	Fixed fire-extinguishing bottle, (ISO 7010-F013, ISO 24409-2; FES010)	Extinguishing media should be colour-coded in the lower part of the symbol and be indicated by a letter on top of the symbol as follows: grey — CO₂ for carbon dioxide or N for nitrogen, yellow — F for foam, brown — H for gas other than CO ₂ or N (type of gas to be indicated), white — P for powder, green — W for water.
A.2.30	 F	Space or group of spaces protected by fire-extinguishing system (ISO 24409-2; SIS042, 043, 044, 045, 046, 047)	Indicate type of extinguishing media [CO₂ for carbon dioxide, F for foam, H for gas other than CO ₂ (type of gas to be indicated), P for powder, W for water, S for sprinkler or high-pressure water extinguishing system] and capacity (kg for gas and powder, litres for water and foam) at the top of the symbol. Add suffix "L" for fixed local application fire-fighting system. Media should be colour-coded in the symbol as follows: grey for carbon dioxide, yellow for foam, brown for gas other than CO ₂ , white for powder, green for water, orange for sprinkler or high-pressure water extinguishing system.
A.2.31		Water-spray-system valves (ISO 24409-2; SIS040)	Indicate at the bottom of the symbol the protected space, if necessary.
A.2.32		High-expansion-foam supply trunk (outlet) (ISO 24409-2; SIS039)	Indicate at the bottom of the symbol the protected space, if necessary.
A.2.33	 IG	Inert gas installation (ISO 24409-2; SIS041)	

No.	Symbol	Referent	Comments on use
A.2.34		Emergency generator (ISO 24409-2; SIS048)	
A.2.35		Emergency source of electrical power (battery) (ISO 24409-2; SIS049)	
A.2.36		Emergency switch-board (ISO 24409-2; SIS050)	
A.2.37		Air compressor for breathing devices (ISO 24409-2; SIS051)	
A.2.38		Control panel for fire detection and alarm system (ISO 24409-2; SIS052)	
A.2.39		Shipboard general alarm (ISO 7010-E031, ISO 24409-2: EES012)	
A.2.40		Fire alarm call point (ISO 7010-F005)	The use of this symbol is optional at the discretion of the competent authority.
A.2.41		Space or group of spaces monitored by smoke detector(s)	The space(s) shall be identified.
A.2.42		Space or group of spaces monitored by heat detector(s)	The space(s) shall be identified.
A.2.43		Space or group of spaces monitored by flame detector(s)	The space(s) shall be identified.

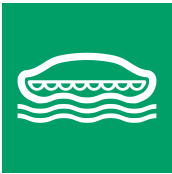
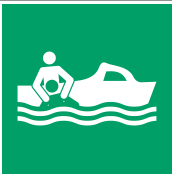
No.	Symbol	Referent	Comments on use
A.2.44		Space monitored by gas detector(s)	
A.2.45		General alarm	
A.2.46		Alarm indicating a fire extinguishing system has been activated	Indicate type of extinguishing media [CO₂ for carbon dioxide, F for foam, H for gas other than CO ₂ (type of gas to be indicated), P for powder, W for water, S for sprinkler or high-pressure water extinguishing system] at the top of the symbol. Media should be colour-coded in the symbol as follows: grey for carbon dioxide, yellow for foam, brown for gas other than CO ₂ , white for powder, green for water, orange for sprinkler or high-pressure water extinguishing system.

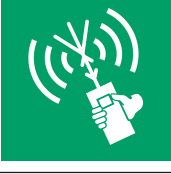
A.3 Symbols for means of escape

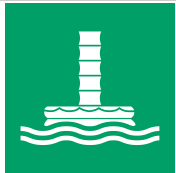
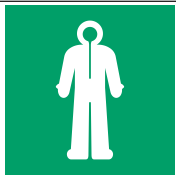
No.	Symbol	Referent	Comments on use
A.3.1		Shipboard assembly station (ISO 7010-E032, ISO 24409-2; MES001)	
A.3.2		Escape ladder (ISO 7010-E059)	

A.4 Symbols for lifesaving appliances

No.	Symbol	Referent	Comments on use
A.4.1		Plan for lifesaving appliances and means of escape	
A.4.2		Plan for fire protection appliances, structural fire protection, life-saving appliances and means of escape	

No.	Symbol	Referent	Comments on use
A.4.3		Muster list	
A.4.4		Lifeboat (ISO 7010-E036, ISO 24409-2; LSS001)	Indicate the identification number of the stowage position at the right side of the symbol. Survival craft capacity, where not indicated in the legend, shall be indicated at the bottom of the symbol.
A.4.5		Rescue boat (ISO 7010-E037, ISO 24409-2; LSS002)	Indicate the identification number of the stowage position at the right side of the symbol. This symbol should also be used for fast rescue boats.
A.4.6		Liferaft(s) (ISO 7010-E038, ISO 24409-2; LSS003)	Indicate the identification number(s) of the stowage position at the right side of the symbol. The number and capacity of the survival craft, where not indicated in the legend, shall be indicated at the bottom of the symbol.
A.4.7		Davit-launched liferaft(s) (ISO 7010-E039, ISO 24409-2; LSS004)	Indicate the identification number(s) of the stowage position at the right side of the symbol. The number and capacity of the survival craft, where not indicated in the legend, shall be indicated at the bottom of the symbol.
A.4.8		Lifebuoy (ISO 7010-E040, ISO 24409-2; LSS005)	
A.4.9		Lifebuoy with line (ISO 7010-E041, ISO 24409-2; LSS006)	
A.4.10		Lifebuoy with light (ISO 7010-E042, ISO 24409-2; LSS007)	
A.4.11		Lifebuoy with line and light (ISO 7010-E043, ISO 24409-2; LSS008)	

No.	Symbol	Referent	Comments on use
A.4.12		Lifebuoy with light and smoke (ISO 7010-E068)	
A.4.13	(left empty)		(left empty)
A.4.14		Lifejacket (ISO 7010-E044, ISO 24409-2; LSS009)	This symbol should be used when lifejackets are stowed outside the cabins. Indicate the number of lifejackets stowed at the right side of the symbol.
A.4.15		Child's lifejacket (ISO 7010-E045, ISO 24409-2; LSS010)	This symbol should be used when lifejackets are stowed outside the cabins. Indicate the number of lifejackets stowed at the right side of the symbol.
A.4.16		Infant's lifejacket (ISO 7010-E046, ISO 24409-2; LSS011)	This symbol should be used when lifejackets are stowed outside the cabins. Indicate the number of lifejackets stowed at the right side of the symbol.
A.4.17		Search and rescue transponder (ISO 7010-E047, ISO 24409-2; LSS012)	
A.4.18		Survival-craft distress signal (ISO 7010-E048, ISO 24409-2; LSS013)	
A.4.19		Rocket parachute flare (ISO 7010-E049, ISO 24409-2; LSS014)	
A.4.20		Line throwing appliance (ISO 7010-E050, ISO 24409-2; LSS015)	
A.4.21		Two-way VHF radio-telephone apparatus (ISO 7010-E051, ISO 24409-2; LSS016)	

No.	Symbol	Referent	Comments on use
A.4.22		Emergency position-indicating radio beacon (ISO 7010-E052, ISO 24409-2; LSS017)	
A.4.23		Embarkation ladder (ISO 7010-E053, ISO 24409-2; LSS018)	
A.4.24		Marine evacuation slide (ISO 7010-E054, ISO 24409-2; LSS019)	Indicate the identification number(s) of the system at the right side of the symbol. The number and capacity of the survival craft, where not indicated in the legend, shall be indicated at the bottom of the symbol.
A.4.25		Marine evacuation chute (ISO 7010-E055, ISO 24409-2; LSS020)	Indicate the identification number(s) of the system at the right side of the symbol. The number and capacity of the survival craft, where not indicated in the legend, shall be indicated at the bottom of the symbol.
A.4.26		Survival clothing (ISO 7010-E056, ISO 24409-2; LSS021)	Indicate the quantity of the immersion suits stowed at the right side of the symbol.
A.4.27		Anti-exposure suit (AES)	Indicate the quantity of the AES stowed at the right side of the symbol.
A.4.28		Thermal protective aid (TPA)	Indicate the quantity of the TPA stowed at the right side of the symbol.
A.4.29		Stretcher (ISO 7010-E013, ISO 24409-2; EES005)	
A.4.30		First Aid (ISO 7010-E003, ISO 24409-2; EES001)	