

# INTERNATIONAL STANDARD

# ISO 17631

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## **Ships and marine technology — Shipboard plans for fire protection, 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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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 17631 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 1, *Lifesaving and fire protection*. It is intended to supplement International Maritime Organization (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.

Annex A forms a normative part of this International Standard. Annex B is for information only.

## Introduction

This International Standard has been developed taking into account the existing IMO guidance on the subject as listed in the bibliography. The symbols in annex A generally conform to the corresponding symbols given in IMO Resolutions A.654(16) ([3] in the bibliography) and A.760(18) ([7] in the bibliography) but, as far as the symbols for fire plans are concerned, it was deemed necessary to carry out the following changes.

- a) The colour code given in ISO 14726-1 and ISO 14726-2 ([11] and [12] in the bibliography) has been adopted in order to render more evident the various types of systems/content of equipment present on board and for which the same symbol is used. This reduces the number of symbols referring to similar systems or equipment and, consequently, avoids cluttering of the plans.
- b) With the aim of rendering them more comprehensible to people on board and to shoreside fire-fighting personnel, who might be called to operate onboard, a small number of symbols (e.g. the one referring to fire hydrant and hose) contained in IMO Resolution A.654(16) have been modified in order to harmonize them with ISO 6309 ([10] in the bibliography).



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

## 1 Scope

This International Standard specifies the content, type, design, layout and usage of shipboard plans for fire-protection appliances, structural fire protection, life-saving appliances and arrangements, and means of escape. It also specifies graphical symbols and illustrations used in such plans.

## 2 Terms and definitions

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

### 2.1

#### **booklet**

compilation of shipboard plans

### 2.2

#### **competent authority**

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

### 2.3

#### **fire locker**

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

### 2.4

#### **fire plan**

plan, plans, or booklets containing information on fire-protection appliances and structural fire protection, as specified in SOLAS 74 (as amended), Chapter II-2

NOTE Fire plan has the meaning of “fire control plan” as mentioned in SOLAS 74 [as amended through IMO Resolution MSC.99(73)], regulation II-2/15.2.4, [1] in the bibliography.

### 2.5

#### **fire-protection appliances**

fixed fire-fighting systems and portable equipment to be used or activated in case of fire, as specified in SOLAS 74 (as amended), Chapter II-2

### 2.6

#### **graphical symbol**

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

### 2.7

#### **illustration**

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

### 2.8

#### **life-saving appliances**

systems or appliances serving the purpose of saving the life of any person, in an emergency at sea as addressed by SOLAS 74 (as amended), Chapter III

**2.9**

**means of escape**

primary and secondary routes by which, in an emergency, a person can move away from a hazard

**2.10**

**primary escape route**

the preferred means of escape, complying with SOLAS 74 [as amended through IMO Resolution MSC.99(73)], regulation II-2/13.3.2.4.1

**2.11**

**safety locker**

locker containing safety-related equipment other than fire-fighting outfits, portable fire-fighting equipment and relevant spare parts

**2.12**

**secondary escape route**

alternate means of escape for use in cases where the primary escape route is not available

**2.13**

**structural fire protection**

passive fire protection, including details of the ventilation systems and fire detection and alarm systems

### **3 Preparation of plans**

#### **3.1 General**

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

**3.1.2** 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 divisions, and 0,75 for other lines. Large plans may be subdivided for clarity.

**3.1.3** Fire-protection appliances and structural fire protection should be placed in separate plans. Main vertical zones, if any, shall be marked and identified in both fire-protection appliances and structural fire-protection 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 plans for machinery spaces and deck areas.

**3.1.4** A legend of symbols and explanations shall be a constituent part of any plan and contain a 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. It shall indicate, next to each symbol, the number of each particular item of fire-protection equipment and arrangements provided. For clarity, preferably only one font type shall be used for text in plans developed in accordance with this International Standard. The minimum letter point size shall be 12. The legend should preferably be placed at the right-hand side of the plan.

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

**3.1.6** The graphical symbols shown in normative annex A shall be used when developing the plans referred to in this International Standard. The colours shall be in accordance with annex A. 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 understandable and shall not be smaller than 6 mm by 6 mm. Generally symbols shall not be framed. All symbols shall be positioned on plans in a manner to clearly indicate the appropriate position 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 the latter case, the line shall have a point size greater than the minimum line point size adopted for the general arrangement plan.



**3.1.7** Fire plans, including those consolidated in the form of a booklet, shall contain the following additional particulars:

- a) ship's construction date as defined in SOLAS 74, as amended ([1] in the bibliography), and application of the SOLAS Conventions and amendments;
- b) original method (e.g., for passenger ships, I, II, or III as defined in SOLAS 48 and SOLAS 60, with or without sprinkler, or, for cargo ships, IC, IIC, or IIIC as defined in SOLAS 74, as amended);
- c) which additional fire-safety measures, if any, were applied; and
- d) dates and descriptions of any modifications to the ship which altered its fire safety.

**3.1.8** For passenger ships, for 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.

**3.1.9** Texts in plans and booklets shall 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 with regard to the working languages of the ship.

## **3.2 Fire-protection appliances plan**

**3.2.1** The plan shall show the arrangement and location of the fire-protection appliances in annex A, symbols A.2.1 to A.2.44, together with means of access to compartments, decks, etc. Where spaces or deck areas are protected by fixed fire-extinguishing systems, the amount of fire-extinguishing medium, except water, shall be indicated in the plan.

**3.2.2** The contents of each fire locker shall be indicated in the legend. The items contained in a fire locker need not be indicated on the plan.

## **3.3 Structural fire-protection plan**

The plan shall show the arrangement and location of the structural fire-protection details in normative annex A, symbols A.1.1 to A.1.18.

## **3.4 Means of escape plan**

The plan shall show each means of escape and access within the ship and identify assembly and embarkation stations. Primary and secondary escape routes, as applicable, shall be identified by arrows as indicated in annex A, symbols A.3.1 and A.3.2.

NOTE For means of escape on passenger ships, reference may be made to IMO resolution A.757(18) ([6] in the bibliography).

## **3.5 Life-saving appliances plan**

**3.5.1** The plan shall show the arrangement and location of the items in normative annex A, symbols A.4.1 to A.4.29. In addition, the plan shall indicate the quantity of each particular item of life-saving appliances and arrangements provided, and the capacity of each assembly station. The number and capacity of survival craft at each stowage position shall be indicated in the legend, or at the bottom of the appropriate symbol.

**3.5.2** The content of each safety locker shall be indicated in the legend. The items in a safety locker need not be indicated on the plan.

**3.5.3** Where lifejackets are installed in cabins, this shall be clearly indicated on the plan.

**3.5.4** Where embarkation stations are not in direct proximity to survival craft, their location(s) shall be clearly indicated on the plan.

### 3.6 Examples of plans

Illustrative examples of plans developed in accordance with this International Standard are contained in informative annex B.

## 4 Documentation requirements

### 4.1 Accessibility of plans on board ship

The plans drawn up in accordance with the provisions of 3.2 to 3.5, which may also take the form of a combined or consolidated plan as referred to in 3.1.3, shall be kept readily available for the information of the ship's officers. In addition, as a minimum, the fire plan shall be permanently displayed for ready consultation at, or near, the navigating bridge and the officers' mess or recreational area.

### 4.2 Distribution of booklets

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

### 4.3 Computer-based systems

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

### 4.4 Updating requirements

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

### 4.5 Accessibility of fire plans for shoreside fire-fighting personnel

**4.5.1** In addition to the permanently displayed fire plan specified in 4.1, in all vessels, a duplicate set of the fire plan or of the booklet containing such a plan shall be permanently stored in a prominently marked weathertight enclosure outside the deckhouse for the assistance of shoreside fire-fighting personnel.

**4.5.2** In oil tankers, chemical tankers, and gas carriers, the fire 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.

**4.5.3** 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 plan shall be properly protected against the marine environment.

NOTE For the marking of the enclosure on board, reference may be made to IMO MSC/Circular 451 ([2] in the bibliography).

Table 1 — Summary of graphical symbols for use in plans

A.1.1	A.1.2	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
<b>Fire Plan</b> 					
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





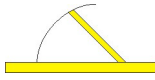

Table 1 (continued)





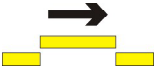

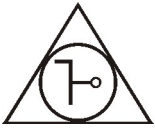
A.2.31	A.2.32	A.2.33	A.2.34	A.2.35	A.2.36
A.2.37	A.2.38	A.2.39	A.2.40	A.2.41	A.2.42
A.2.43	A.2.44	A.3.1	A.3.2	A.4.1	A.4.2
A.4.3	A.4.4	A.4.5	A.4.6	A.4.7	A.4.8
A.4.9	A.4.10	A.4.11	A.4.12	A.4.13	A.4.14
A.4.15	A.4.16	A.4.17	A.4.18	A.4.19	A.4.20
A.4.21	A.4.22	A.4.23	A.4.24	A.4.25	A.4.26
A.4.27	A.4.28	A.4.29			

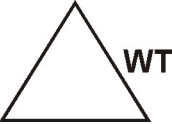
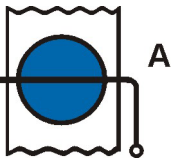



## Annex A (normative)

### Graphical symbols for use in plans


#### A.1 Symbols for structural fire-protection

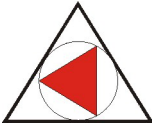
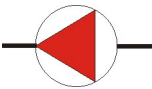


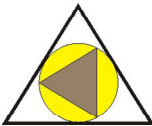
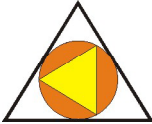

No.	Symbol	Referent	Comments on use
A.1.1		A-class division	
A.1.2		B-class division	
A.1.3		Main vertical zone	
A.1.4		A-class hinged fire door	The symbol should be at the door position and should show the actual direction of the door. Add <b>WT</b> to the right side of the symbol in the case of a watertight door. Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.
A.1.5		B-class hinged fire door	The symbol should be at the door position and should show the actual direction of the door. Add <b>WT</b> to the right side of the symbol in the case of a watertight door. Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.
A.1.6		A-class hinged self-closing fire door	The symbol should be at the door position and should show the actual direction of the door. Add <b>WT</b> to the right side of the symbol in the case of a watertight door. Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.

No.	Symbol	Referent	Comments on use
A.1.7		B-class hinged self-closing fire door	<p>The symbol should be at the door position and should show the actual direction of the door.</p> <p>Add <b>WT</b> to the right side of the symbol in the case of a watertight door.</p> <p>Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.</p>
A.1.8		A-class sliding fire door	<p>The symbol should be at the door position and should show the actual direction of the door.</p> <p>Add <b>WT</b> to the right side of the symbol in the case of a watertight door.</p> <p>Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.</p>
A.1.9		B-class sliding fire door	<p>The symbol should be at the door position and should show the actual direction of the door.</p> <p>Add <b>WT</b> to the right side of the symbol in the case of a watertight door.</p> <p>Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.</p>
A.1.10		A-class self-closing sliding fire door	<p>The symbol should be at the door position and should show the actual direction of the door.</p> <p>Add <b>WT</b> to the right side of the symbol in the case of a watertight door.</p> <p>Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.</p>
A.1.11		B-class self-closing sliding fire door	<p>The symbol should be at the door position and should show the actual direction of the door.</p> <p>Add <b>WT</b> to the right side of the symbol in the case of a watertight door.</p> <p>Add <b>SWT</b> to the right side of the symbol in the case of a semi-watertight door.</p>
A.1.12		Ventilation remote control or shut-off	<p>Colour of the circle and a letter at the right side of the symbol should indicate as follows:</p> <p><b>A</b> = blue for accommodation and service spaces;</p> <p><b>M</b> = green for machinery spaces;</p> <p><b>C</b> = yellow for cargo spaces.</p>
A.1.13		Remote control for skylight	





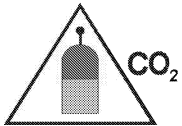
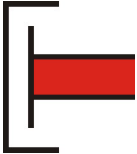
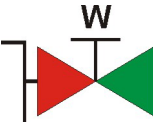
No.	Symbol	Referent	Comments on use
A.1.14		Remote control for watertight doors or fire doors	Add <b>WT</b> to the right side of the symbol to indicate remote control for watertight doors or <b>FD</b> to indicate remote control for fire doors.
A.1.15		Fire damper	Colour of the circle and a letter at the right side of the symbol should indicate as follows: <b>A</b> = blue for accommodation and service spaces; <b>M</b> = green for machinery spaces; <b>C</b> = 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	Colour of the circle and a letter at the right side of the symbol should indicate as follows: <b>A</b> = blue for accommodation and service spaces; <b>M</b> = green for machinery spaces; <b>C</b> = yellow for cargo spaces. Identification number of the damper may be shown at the bottom of the symbol.
A.1.17		Remote control for fire damper(s)	Colour of the circle and a letter at the right side of the symbol should indicate as follows: <b>A</b> = blue for accommodation and service spaces; <b>M</b> = green for machinery spaces; <b>C</b> = 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	Colour of the circle and a letter at the right side of the symbol should indicate as follows: <b>A</b> = blue for accommodation and service spaces; <b>M</b> = green for machinery spaces; <b>C</b> = yellow for cargo spaces. Identification number of the closing device(s) may be shown.

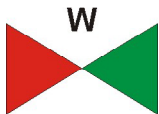
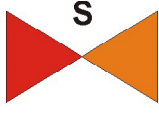
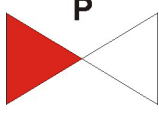
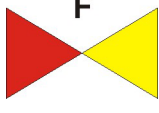
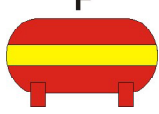
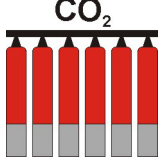
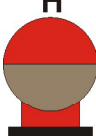
## A.2 Symbols for fire-protection appliances

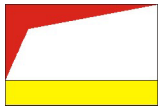
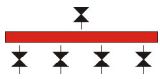

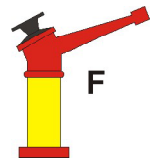

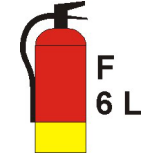
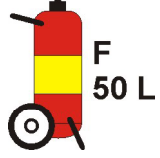
No.	Symbol	Referent	Comments on use
A.2.1		Fire protection appliances or structural fire protection plan	

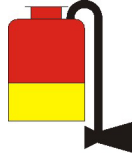

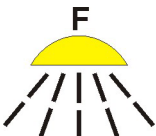


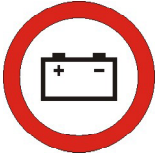
No.	Symbol	Referent	Comments on use
A.2.2		Remote control for fire pump(s)	
A.2.3		Fire pump(s)	The type, quantity of water delivered per time unit, and pressure head shall be indicated either at the right side of the symbol or in the legend.
A.2.4		Remote control for emergency fire pump or fire pump supplied by the emergency source of power	
A.2.5		Emergency fire pump	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(s) remote shut-off	
A.2.7		Lube oil pump(s) remote shut-off	
A.2.8		Remote control for bilge pump(s)	

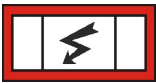
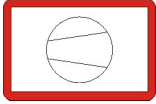
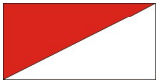
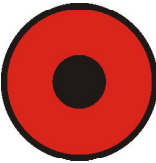
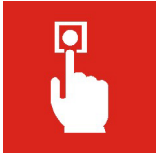

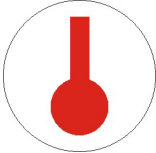



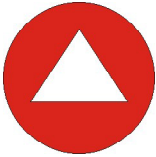
No.	Symbol	Referent	Comments on use
A.2.9		Remote control for emergency bilge pump	
A.2.10		Remote control for fuel oil valves	
A.2.11		Remote control for lube oil valves	
A.2.12		Remote control for fire pump valve(s)	
A.2.13		Remote release station	Indicate at the bottom of the symbol the protected 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 — <b>CO<sub>2</sub></b> for carbon dioxide or <b>N</b> for nitrogen, brown — <b>H</b> for gas other than CO <sub>2</sub> or N (type of gas to be indicated), white — <b>P</b> for powder, green — <b>W</b> for water.
A.2.14		International shore connection	
A.2.15		Fire hydrant	

No.	Symbol	Referent	Comments on use
A.2.16		Fire main section valve	Indicate the reference number of the valve at the right side of the symbol.
A.2.17		Sprinkler-section valve	<p>Indicate the reference number of the valve at the right side of the symbol.</p> <p>This symbol may also be applied to equivalent water-extinguishing systems.</p> <p>Valves for automatic dry-pipe sprinkler systems should be indicated in the legend.</p>
A.2.18		Powder-section valve	Indicate the reference number of the valve at the right side of the symbol.
A.2.19		Foam-section valve	Indicate the reference number of the valve at the right side of the symbol.
A.2.20		Fixed fire-extinguishing installation	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 — <b>CO<sub>2</sub></b> for carbon dioxide or <b>N</b> for nitrogen, yellow — <b>F</b> for foam, brown — <b>H</b> for gas other than CO <sub>2</sub> or N (type of gas to be indicated), white — <b>P</b> for powder, green — <b>W</b> for water.
A.2.21		Fixed fire-extinguishing battery	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 — <b>CO<sub>2</sub></b> for carbon dioxide or <b>N</b> for nitrogen, yellow — <b>F</b> for foam, brown — <b>H</b> for gas other than CO <sub>2</sub> or N (type of gas to be indicated), white — <b>P</b> for powder, green — <b>W</b> for water.
A.2.22		Fixed fire-extinguishing bottle, placed in protected area	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 — <b>CO<sub>2</sub></b> for carbon dioxide or <b>N</b> for nitrogen, yellow — <b>F</b> for foam, brown — <b>H</b> for gas other than CO <sub>2</sub> or N (type of gas to be indicated), white — <b>P</b> for powder, green — <b>W</b> for water.



No.	Symbol	Referent	Comments on use
A.2.23		High-expansion-foam supply trunk (outlet)	Indicate at the bottom of the symbol the protected space, if necessary.
A.2.24		Water-spray-system valves	Indicate at the bottom of the symbol the protected space, if necessary.
A.2.25		Inert gas installation	
A.2.26		Monitor	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: yellow — <b>F</b> for foam, white — <b>P</b> for powder, green — <b>W</b> for water.
A.2.27		Fire hose and nozzle	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 — <b>F</b> for foam, white — <b>P</b> for powder, green — <b>W</b> for water.
A.2.28		Fire extinguisher	Indicate type of extinguishing media [ <b>CO<sub>2</sub></b> for carbon dioxide, <b>F</b> for foam, <b>H</b> for gas other than CO <sub>2</sub> (type of gas to be indicated), <b>P</b> for powder, <b>W</b> 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 <sub>2</sub> , white for powder, green for water.
A.2.29		Wheeled fire extinguisher	Indicate type of extinguishing media [ <b>CO<sub>2</sub></b> for carbon dioxide, <b>F</b> for foam, <b>H</b> for gas other than CO <sub>2</sub> (type of gas to be indicated), <b>P</b> for powder, <b>W</b> 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 <sub>2</sub> , white for powder, green for water.

No.	Symbol	Referent	Comments on use
A.2.30		Portable foam applicator unit or relevant spare tank(s)	
A.2.31		Fire locker	Indicate the number of the fire locker at the right side of the symbol.
A.2.32		Space or group of spaces protected by fire-extinguishing system	Indicate type of extinguishing media [ <b>CO<sub>2</sub></b> for carbon dioxide, <b>F</b> for foam, <b>H</b> for gas other than CO <sub>2</sub> (type of gas to be indicated), <b>P</b> for powder, <b>W</b> for water, <b>S</b> 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 <sub>2</sub> , white for powder, green for water, orange for sprinkler or high-pressure water extinguishing system.
A.2.33		Water fog applicator	
A.2.34		Emergency source of electrical power (generator)	
A.2.35		Emergency source of electrical power (battery)	


No.	Symbol	Referent	Comments on use
A.2.36		Emergency switchboard	
A.2.37		Air compressor for breathing devices	
A.2.38		Control panel for fire detection and alarm system	
A.2.39		Push button/switch for general alarm	
A.2.40		Manually operated call points	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.

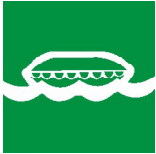






No.	Symbol	Referent	Comments on use
A.2.43		Space or group of spaces monitored by heat detector(s)	The space(s) shall be identified.
A.2.44		Space monitored by gas detector(s)	








### A.3 Symbols for means of escape

No.	Symbol	Referent	Comments on use
A.3.1		Primary escape route	
A.3.2		Secondary escape route	

### A.4 Symbols for life-saving appliances




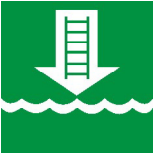



No.	Symbol	Referent	Comments on use
A.4.1	<b>Safety</b>  <b>Plan</b>	Plan for life-saving appliances and means of escape	The space(s) shall be identified.








No.	Symbol	Referent	Comments on use
A.4.2		Lifeboat	Indicate the reference 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.4.3		Rescue boat	Indicate the reference number of the stowage position at the right side of the symbol. This symbol should also be used for fast rescue boats.
A.4.4		Liferaft(s)	Indicate the reference 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.4.5		Davit-launched liferaft(s)	Indicate the reference 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.4.6		Lifebuoy	
A.4.7		Lifebuoy with line	
A.4.8		Lifebuoy with light	

No.	Symbol	Referent	Comments on use
A.4.9		Lifebuoy with light and smoke	
A.4.10		Lifejacket	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.4.11		Child's lifejacket	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.4.12		Assembly station	Indicate the reference letter of the assembly station at the right side of the symbol.
A.4.13		Search and Rescue Transponder (SART)	
A.4.14		Survival-craft distress signal	
A.4.15		Rocket parachute flares	

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No.	Symbol	Referent	Comments on use
A.4.16		Line throwing appliance	
A.4.17		Two-way VHF radiotelephone apparatus	
A.4.18		Emergency Position-Indicating Radio Beacon (EPIRB)	
A.4.19		Embarkation ladder or alternative approved device	
A.4.20		Marine evacuation system (slide)	Indicate the reference 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.4.21		Marine evacuation system (chute)	Indicate the reference 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.4.22		Immersion suit	Indicate the quantity of the immersion suits stowed at the right side of the symbol.

No.	Symbol	Referent	Comments on use
A.4.23		Anti-exposure suit (AES)	Indicate the quantity of the AES stowed at the right side of the symbol.
A.4.24		Thermal protective aid (TPA)	Indicate the quantity of the TPA stowed at the right side of the symbol.
A.4.25		Stretcher	
A.4.26		Medical locker	
A.4.27		Emergency escape breathing device (EEBD)	Indicate the quantity of the EEBD stowed at the right side of the symbol.
A.4.28		Emergency telephone	
A.4.29		Safety locker	Indicate the reference number of the safety locker at the right side of the symbol.

## **Annex B** (informative)

### **Illustrative examples of plans**

Figure B.1 is an example of a structural fire-protection plan.

Figure B.2 is an example of a fire-protection appliances plan.

Figure B.3 is an example of a safety plan for means of escape.

Figure B.4 is an example of a safety plan for live-saving appliances.

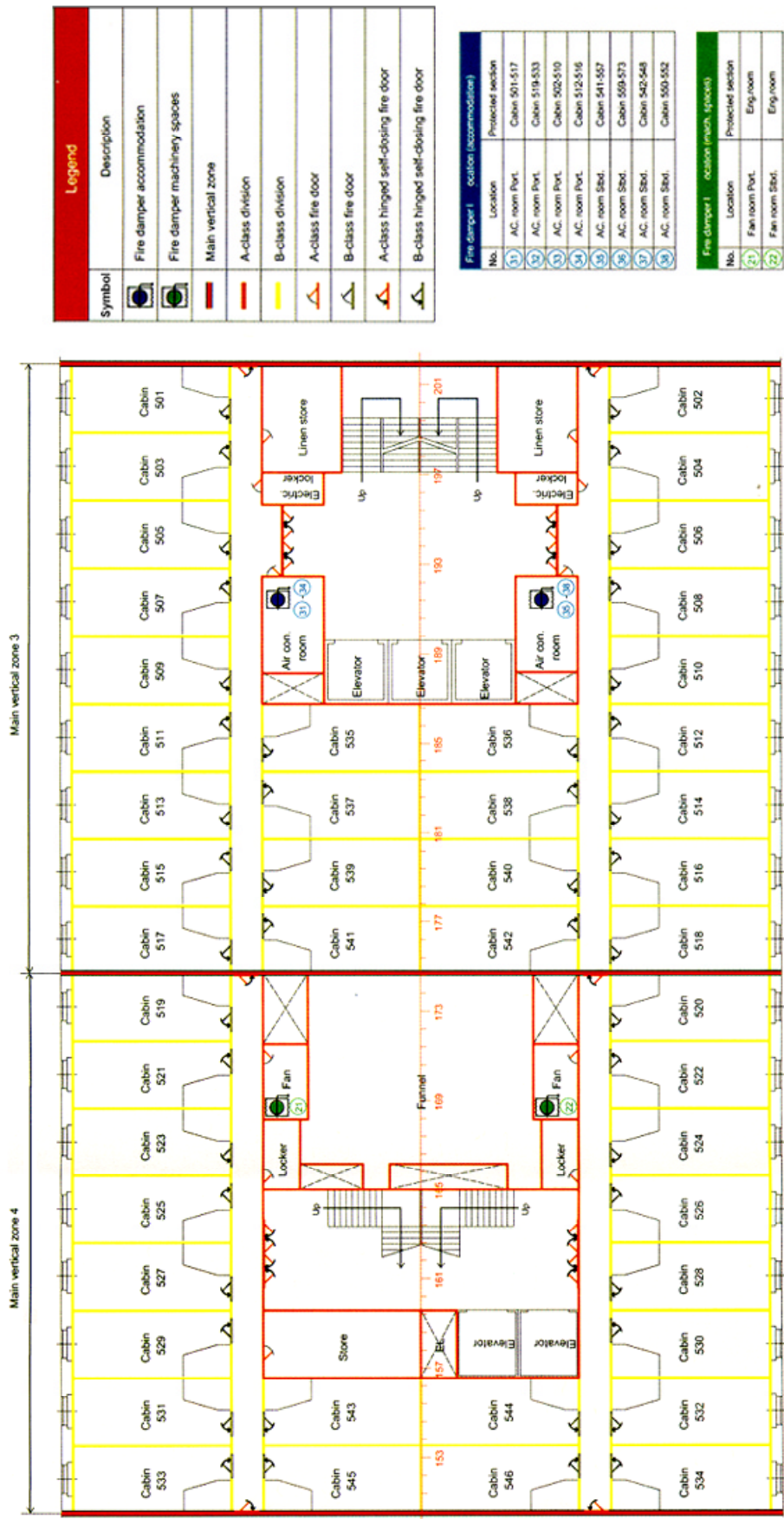


Figure B.1 — Structural fire-protection plan

Legend	
Symbol	Description
	Fire hydrant
	Fire hose and nozzle (length=20m)
	Foam fire extinguisher 9 liters
	Powder fire extinguisher 6 kg
	CO2 fire extinguisher 5 kg
	Fire fighter outfit locker (see detail list)
	Space protected by sprinkler fire extinguishing system
	Space protected by fire CO2 extinguishing system
	Sprinkler section valve
	Main vertical zone
	Manually operated call point
	Space protected by smoke detectors
	Space protected by heat detectors

No	Description
4	Protective clothing
4	Pair of gloves
4	Pair of boots
4	Helmet
4	Electric safety lamp
4	Fire axe
4	Belt with snaphook and lifeline
4	Breathing apparatus
4	Spare cylinder for breathing apparatus

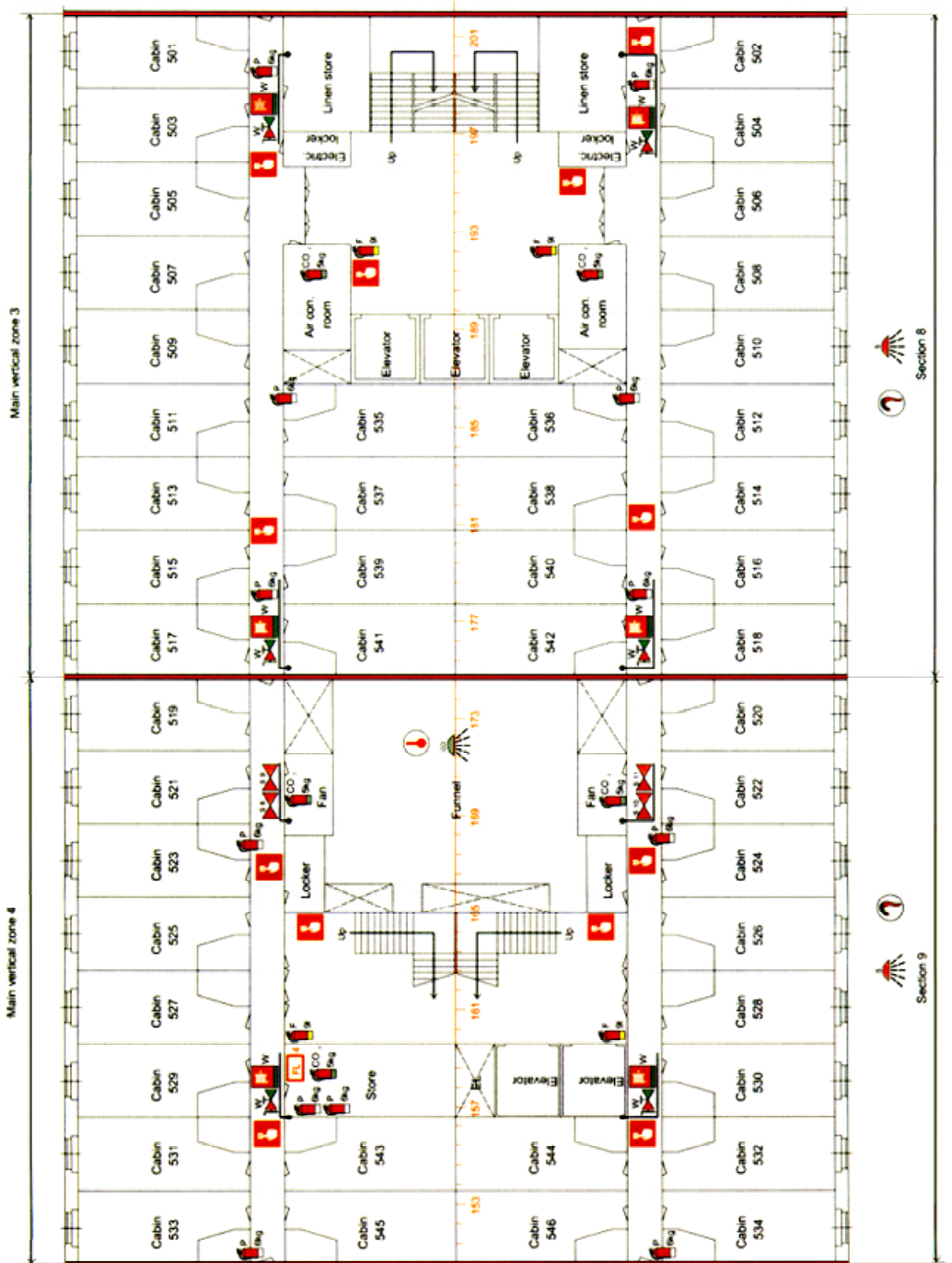


Figure B.2 — Fire-protection appliances plan

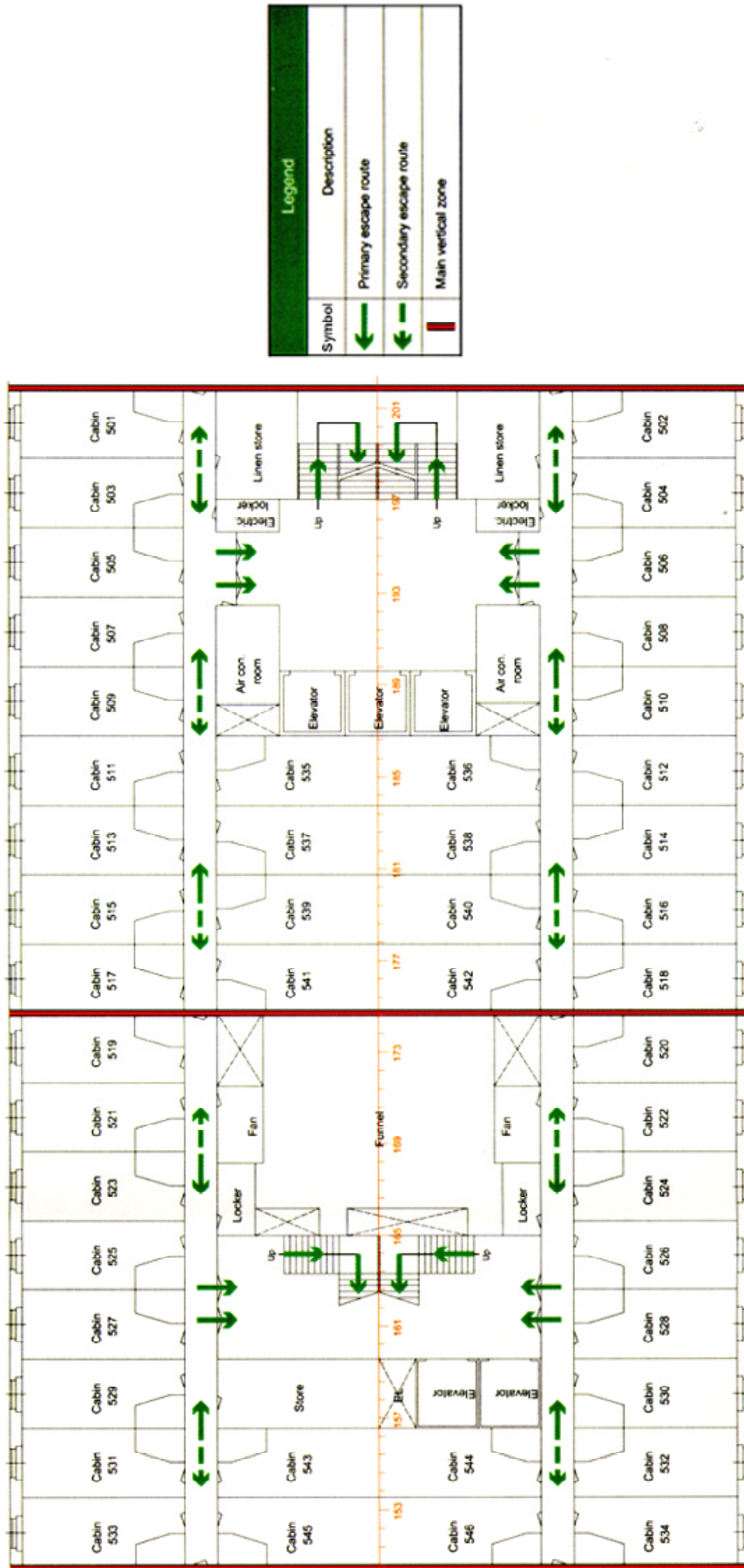


Figure B.3 — Safety plan: Means of escape

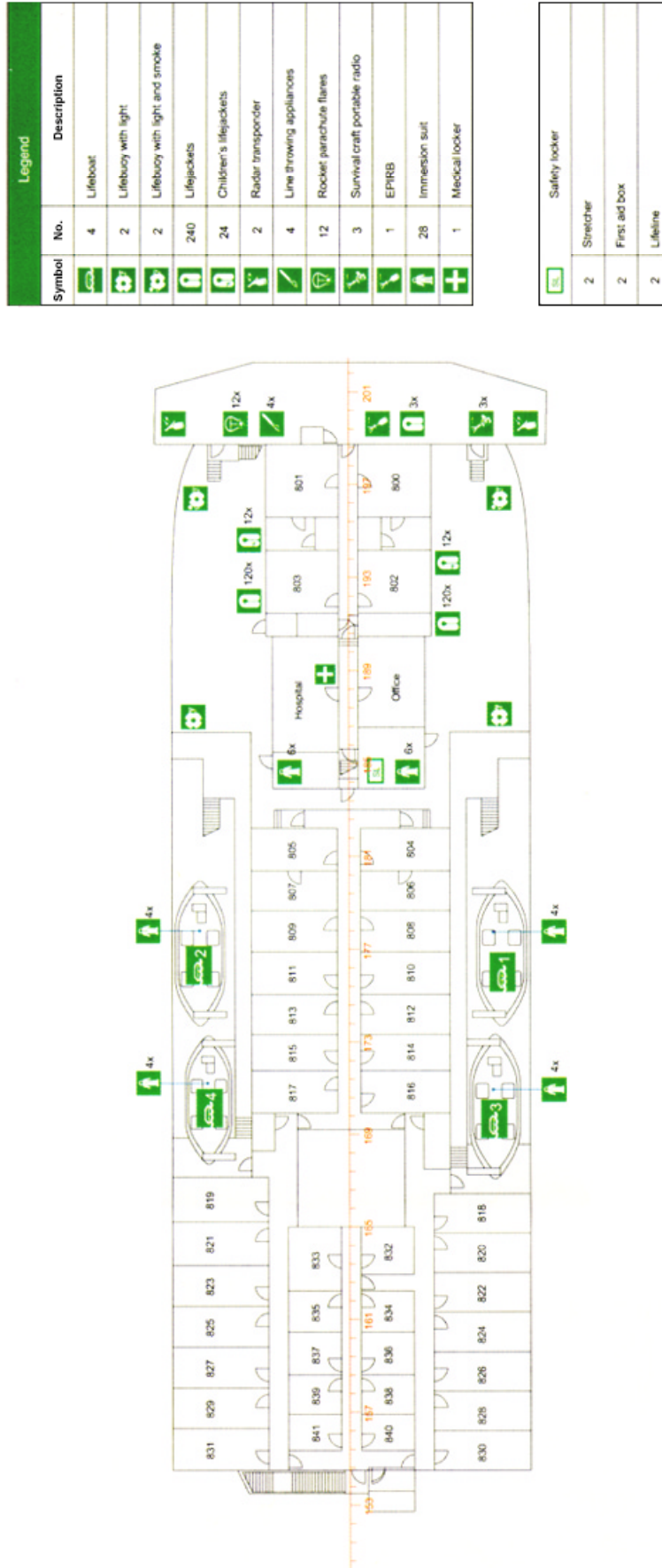


Figure B.4 — Safety plan: Life-saving appliances

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- [3] *IMO Resolution A.654(16) (adopted 19 November 1989), Graphical symbols for fire control plans*
- [4] *IMO MSC/Circular 699 (dated 17 July 1995), Revised guidelines for passenger safety instructions*
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- [9] *ISO 4196:1984, Graphical symbols — Use of arrows*
- [10] *ISO 6309:1987, Fire protection — Safety signs*
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1) To be published.



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