BS ISO 24409-1:2020

BSI Standards Publication

Ships and marine technology — Design, location and use of shipboard safety signs, fire control plan signs, safety notices and safety markings

Part 1: Design principles

Documents
Document Sharing Hub

Full document details: BS ISO 24409-1:2020

National foreword

This British Standard is the UK implementation of ISO 24409-1:2020. It supersedes BS ISO 24409-1:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SME/32, Ships and marine technology - Steering committee.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2020
Published by BSI Standards Limited 2020

ISBN 978 0 539 00184 6

ICS 47.020.01

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

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2020.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS ISO 24409-1:2020

INTERNATIONAL STANDARD

ISO 24409-1

Second edition
2020-03

Ships and marine technology — Design, location and use of shipboard safety signs, fire control plan signs, safety notices and safety markings —

Part 1: Design principles

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

Partie 1: Principes de conception

Reference number
ISO 24409-1:2020(E)

Documents
Document Sharing Hub
© ISO 2020

Full document details: BS ISO 24409-1:2020

COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

© ISO 2020 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS ISO 24409-1:2020

Contents

Page

Foreword ... **v**
Introduction ... **vi**
1 Scope ... **1**
2 Normative references ... **1**
3 Terms and definitions ... **1**
4 Types and use of signs, markings and notices ... **2**
4.1 General ... 2
4.2 Safety signs ... 3
4.2.1 Means of escape signs (MES) — Escape route identification ... 3
4.2.2 Emergency equipment signs (EES) — Use and location of first aid facilities and portable safety equipment ... 3
4.2.3 Life-saving systems and appliances signs (LSS) — Use and location of life-saving systems and appliances ... 3
4.2.4 Fire-fighting equipment signs (FES) — Use and location of fire-fighting equipment ... 3
4.2.5 Prohibition signs (PSS) — Prohibited actions ... 3
4.2.6 Warning signs (WSS) — Identification of hazards ... 3
4.2.7 Mandatory action signs (MSS) — Mandatory notices and instructions ... 3
4.3 Fire control plan signs ... 3
5 Design of shipboard safety signs ... **3**
5.1 General ... 3
5.2 Safety messages ... 4
5.3 Meaning, function, and image content ... 4
5.4 Colour and geometric shape ... 4
5.4.1 General ... 4
5.4.2 Colour area of the safety sign ... 5
5.5 Graphical symbols ... 6
5.6 Combination of graphical symbols or graphical symbol elements ... 6
5.7 Determinants ... 6
5.8 Prohibition ... 7
5.9 Borders ... 7
5.10 Arrows ... 7
6 Supplementary signs and combination signs ... **8**
6.1 General ... 8
6.2 Combination signs ... 8
6.3 Colour of supplementary signs ... 8
6.4 Text for supplementary signs ... 8
6.5 Types of supplementary signs ... 8
7 Layout of combination signs ... **12**
7.1 General ... 12
7.2 Borders ... 12
7.3 Arrangements ... 12
8 Multiple signs ... **13**
9 Use of arrows ... **14**
10 Fire control plan signs ... **15**
11 Safety markings ... **16**
12 Illumination and contrast of safety signs and fire control plan signs ... **16**
13 Durability and photometric performance of signs ... **17**

Documents
Document Sharing Hub

© ISO 2020 – All rights reserved

Full document details: BS ISO 24409-1:2020

14 Marking of signs **17**
Bibliography **18**

© ISO 2020 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS ISO 24409-1:2020

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 24409-1:2010), which has been technically revised.

The main changes compared to the previous edition are as follows:

— addition of the definition and use of “fire control plan sign”;

— deletion of references to “mimic signs”;

— updated graphics from ISO 7010; and

— updated graphics from ISO 24409-2.

A list of all parts in the ISO 24409 series can be found on the ISO website.

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.

© ISO 2020 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 24409-1:2020

Introduction

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

As such, the ISO 24409 series clarifies and supplements existing requirements set out in SOLAS regulations II-2/13.3.2.5.1, III/9.2.3 and III/11.5, and in ISO 17631. However, it is directly applicable to shipboard safety and fire control plan signs only, and does not deal with graphical symbols to be used on shipboard plans or documentation used for professionals.

This document spells out general design principles applicable to all types of shipboard safety and fire control plan signs. Specific signs are catalogued in ISO 24409-2, and their application on ships is specified in ISO 24409-3. Shipboard plans for general emergency information will be specified in a future part[1)] in the ISO 24409 series.

1) Planned for future work: ISO 24409-4, *Ships and marine technology — Design, location and use of shipboard safety signs, safety-related signs, safety notices and safety markings — Part 4: Shipboard plans for general emergency information.*

© ISO 2020 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS ISO 24409-1:2020

Ships and marine technology — Design, location and use of shipboard safety signs, fire control plan signs, safety notices and safety markings —

Part 1:
Design principles

IMPORTANT — The colours represented in the electronic file of this document can be neither viewed on screen nor printed as true representations. For the purposes of colour matching, see ISO 3864-4 which provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.

1 Scope

This document specifies general design principles for shipboard safety signs, fire control plan signs, markings and notices intended to communicate safety-related information to persons on board ships.

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.

ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 3864-3:2012, *Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs*

ISO 3864-4, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials*

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

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

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

ISO 17724, *Graphical symbols — Vocabulary*

IMO, *International Safety Management (ISM) Code*

3 Terms and definitions

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

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

© ISO 2020 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 24409-1:2020