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Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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This European Standard was approved by CEN on 16 July 2017.

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Ref. No. EN ISO 9094:2017 E

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European foreword

The text of ISO 9094:2015 has been prepared by Technical Committee ISO/TC 188 "Small craft" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 9094:2017.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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

This document supersedes EN ISO 9094:2015.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 9094:2015 has been approved by CEN as EN ISO 9094:2017 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2013/53/EU

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directive 2013/53/EU.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Directive 2013/53/EU

Clauses/sub-clauses of this standard	Corresponding annexes/paragraphs of Directive 2013/53/EU	Comments
9 Annex B	I.A.2.5 - Owner's manual	
5; 6	I.A.3.8 - Escape	In respect of viable means of escape in the event of fire only, this standard does not deal with escape from inversion.
4.3.1.1; 4.3.2	I.A.5.1.1 – Engine and engine compartments, inboard engine	In respect of insulating materials and separation from habitable spaces.
4.3.2.3	I.A.5.1.2 - Engine and engine compartments, ventilation	With respect to the requirements for fixed petrol engines and fixed petrol tanks only.
4.1.3	I.A.5.2.1 - Fuel system, General	
4.1.3; 4.3.1.2	I.A.5.2.2 - Fuel system, Fuel tanks	
4.4; 4.6	I.A.5.3 - Electrical system	In respect of minimizing the risk of fire and to prevent the accumulation of explosive gases which might be emitted from batteries.

		Ignition-protected items shall be in accordance with EN ISO 8846 (EN 28846).
4.5	I.A.5.5 - Gas system	In respect of liquefied petroleum gas (LPG) systems and self-contained appliances.
4; 5; 6 Annex A	I.A.5.6.1 - Fire protection – general	The scope of this standard defines a practical degree of fire prevention and protection intended to provide enough time for occupants to escape a fire on board small craft up to 24m length of hull. The exclusions shall be noted.
7; 8	I.A.5.6.2 – Fire protection - Fire-fighting equipment	In respect of minimum firefighting requirements according to the type of engine fuel and power rating, habitable spaces and provision of heating and cooking appliances. Informative annexes C and D should be noted.

WARNING - Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

INTERNATIONAL STANDARD

ISO 9094

First edition 2015-11-15

Small craft — Fire protection

Petits navires — Protection contre l'incendie



ISO 9094:2015(E)



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Foreword

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

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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

The committee responsible for this document is ISO/TC 88, *Small craft*.

This first edition of ISO 9094 cancels and replaces ISO 9094-1:2003 and ISO 9094-2:2002.

The major technical changes concern:

- change in definition of "readily accessible" being for "emergency conditions";
- added definitions and requirements for cooking appliances, solid fuel appliances and heating appliance installations;
- requirements for cooking and heating appliances using liquid fuel;
- specific requirements addressing compartments containing petrol tanks and containers and portable petrol driven engines;
- added requirements for fire protection for "domed" decklights;
- fire detection requirements for craft over 12 m;
- clarification of escape routes for quarter cabin arrangements;
- detailed requirements for access to deck hatches designated as fire exits;
- changes to engine and engine compartment fire extinguishing requirements;
- fixed fire extinguishing systems to be "approved systems";
- requirement for diesel engine shut down and "shut off dampers";
- audible alarm requirements required only for protected spaces able to be occupied.

Introduction

This International Standard covers the prevention of fire and the protection of life in case of fire on small craft.

It is intended to ensure that the design and layout of the craft and the type of equipment installed minimize the risk and spread of fire and that every habitable craft is provided with viable means of escape in the event of fire.

The requirements in this document might not be effective against some battery chemistries (for example Lithium based products). Battery manufacturers should be consulted for appropriate methods of fire suppression.

Small craft — Fire protection

1 Scope

This International Standard defines a practical degree of fire prevention and protection intended to provide enough time for occupants to escape a fire on board small craft.

It applies to all small craft of up to 24 m length of hull ($L_{\rm H}$) except for personal watercraft.

This International Standard excludes:

- the design and installation of those permanently installed galley stoves and heating appliances (including components used to distribute the heat) using fuels that are liquid at atmospheric pressure on small craft, which are covered by ISO 14895;
- carbon monoxide detecting systems, which are covered by ISO 12133[3].

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3-7, Portable fire extinguishers – Part 7: Characteristics, performance requirements and test methods

EN 1869, Fire blankets

IEC 60092-507, Electrical installations in ships — Part 507: Small vessels

ISO 4589-3, Plastics — Determination of burning behaviour by oxygen index — Part 3: Elevated-temperature test

ISO 5923, Equipment for fire protection and fire fighting — Fire extinguishing media — Carbon dioxide

ISO 7010:2011, Graphical symbols — Safety colours and safety signs — Registered safety signs

ISO 7165, Fire fighting-Portable fire extinguishers – Performance and construction

ISO 8846, Small craft — Electrical devices — Protection against ignition of surrounding flammable gases

 ${\tt ISO~10088}, {\it Small~craft-Permanently~installed~fuel~systems}$

ISO 10133, Small craft — Electrical systems — Extra-low-voltage d.c. installations

ISO 10239, Small craft — Liquefied petroleum gas (LPG) systems

ISO 10240, Small craft — Owner's manual

ISO 11105:1997, Small craft — Ventilation of petrol engine and/or petrol tank compartments

ISO 12216, Small craft — Windows, portlights, hatches, deadlights and doors — Strength and watertightness requirements

ISO 13297, Small craft — Electrical systems — Alternating current installations

ISO 14895, Small craft — Liquid-fuelled galley stoves and heating appliances

ISO 16315, Small craft — Electric propulsion system

ISO 21487, Small craft — Permanently installed petrol and diesel fuel tanks

koniec náhľadu – text ďalej pokračuje v platenej verzii STN