

**For comments only**

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भारतीय मानक का मसौदा  
लघु पोत – अग्नि सुरक्षा  
(IS 17470 का प्रथम पुनरीक्षण)

Draft *Indian Standard*  
**Small Craft — Fire Protection**  
(First Revision of IS 17470)

ICS 47.080

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Inland Harbour Crafts and Fishing Vessels Sectional Committee, TED 18

## **NATIONAL FOREWORD**

This draft Indian Standard (First Revision) which is identical with ISO 9094 : 2022 ‘Small craft — Fire protection’ issued by the International Organization for Standardization (ISO), will be adopted by the Bureau of Indian Standards on recommendation of the Inland Harbour Crafts and Fishing Vessels Sectional Committee and approval of the Transport Engineering Divisional Council.

This draft standard was first published in 2020 which was identical adoption of ISO 9094:2015. This first revision of the standard has been undertaken to harmonize it with ISO 9094:2022. The changes compared to the previous edition are as follows:

- ‘Engine compartment’ definition (3.3) has been updated;
- ‘Fire resistant’ definition (3.21) has been added;
- Pitch angle up to 15° for all craft to prevent cooking devices from sliding off the stove, in 4.1.1, has been updated;
- Pitch and heel angles in 4.2.1 have been updated;
- Requirements for protection from open flame in 4.2.2 have been updated;
- Table 1 to expand the understanding of zone protection has been updated;

- g) Clarification for fire escape routes in 6.1 has been added;
- h) Table 2, 'Protection of the engine(s) and engine compartments', has been updated;
- j) The requirements for portable fire extinguisher locations have been updated (see 7.5);
- k) The asphyxiant medium from fixed fire extinguishing systems has been removed (see 7.6);
- m) Clause 8, "Displayed information", has been updated;
- n) The Bibliography has been updated.

The text of ISO Standard may be approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this draft standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 4589-3:2017 Plastics — Determination of burning behaviour by oxygen index — Part 3: Elevated temperature test	IS 13360 (Part 6/ Sec 20) : 2019 Plastics — Method of testing: Part 6 Thermal properties, Section 20 Flammability of oxygen index — Elevated temperature test (First Revision)	Identical
ISO 7165:2017 Firefighting Portable fire extinguishers — Performance and construction	IS 15683 : 2018 Portable fire extinguishers — Performance and construction — Specification (First Revision)	Technically Modified to 2009 version
ISO 21487 Small Craft - Permanently Installed Petrol and Diesel Fuel Tanks	IS 17471 Small Craft - Permanently Installed Petrol and Diesel Fuel Tanks ( <i>Under Revision</i> )	Identical

The technical committee may also review the provisions of following International Standards referred in this draft standard and decide if these are acceptable for use in conjunction with this draft standard:

<i>International Standard/ Other Publication</i>	<i>Title</i>
ISO 8846:1990	Small craft — Electrical devices — Protection against ignition of surrounding flammable gases
ISO 10088	Small craft — Permanently installed fuel systems
ISO 10239:2014	Small craft — Liquefied Petroleum gas (LPG) systems
ISO 11105:2020	Ventilation of petrol engine and/ or petrol tank compartments
ISO 12216	Small craft — Windows, portlights, hatches, deadlights and doors — Strength and water-tightness requirements
ISO 13297	Small craft — Electrical systems — Alternating and direct current installations
ISO 14895:2016	Small craft — Liquid-fuelled galley stoves and heating appliances
ISO 16315	Small craft — Electric propulsion system
IEC 60092-507:2014	Electrical installations in ships — Part 507: Small vessels
EN 3-7: 2004+A1: 2007	Portable fire extinguishers – Part 7: Characteristics, performance requirements and test methods
EN 1869: 2019	Fire blankets
EN 15609:2021	LPG equipment and accessories — LPG propulsion systems for boats, yachts and other craft

Attention is drawn to the possibility that some of the elements of this draft standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

Annex A forms normative part of this draft standard. Annex B and Annex C is for information only.

In reporting the result of a test or analysis made in accordance with this draft standard, if the final value, observed or calculated, is to be rounded off it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'.

## INTRODUCTION

This document 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 may not be effective against some battery chemistries (for example Lithium based products). Battery manufacturers should be consulted for appropriate methods of fire suppression.

## SCOPE

This document 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 having a length of the hull ( $L_H$ ) of up to 24 m except for personal watercraft.

This document does not cover:

- The design and installation of 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 14895:2016;
- Carbon monoxide detecting systems, which are covered by ISO 12133.

**FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 9094 : 2022 OR CONTACT:**

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