

VÄIKELAEVAD. STABIILSUSE JA UJUVUSE HINDAMINE  
JA KLASSIFITSEERIMINE. OSA 2: PURJELAEVAD, MILLE  
KERE PIKKUS ON 6 MEETRIT VÕI ROHKEM

Small craft - Stability and buoyancy assessment and  
categorization - Part 2: Sailing boats of hull length  
greater than or equal to 6 m (ISO 12217-2:2022)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN ISO 12217-2:2026 sisaldab Euroopa standardi EN ISO 12217-2:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.10.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN ISO 12217-2:2026 consists of the English text of the European standard EN ISO 12217-2:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 29.10.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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EUROPEAN STANDARD

EN ISO 12217-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2025

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Supersedes EN ISO 12217-2:2017

English Version

Small craft - Stability and buoyancy assessment and categorization - Part 2: Sailing boats of hull length greater than or equal to 6 m (ISO 12217-2:2022)

Petits navires - Évaluation et catégorisation de la stabilité et de la flottabilité - Partie 2: Bateaux à voiles d'une longueur de coque supérieure ou égale à 6 m (ISO 12217-2:2022)

Kleine Wasserfahrzeuge - Festlegung und Kategorisierung von Querstabilität und Auftrieb - Teil 2: Segelboote ab 6 m Rumpflänge (ISO 12217-2:2022)

This European Standard was approved by CEN on 15 October 2025.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

This document (EN ISO 12217-2:2025) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with Technical Committee CEN/TC 464 "Small Craft" the secretariat of which is held by SIS.

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 April 2026, and conflicting national standards shall be withdrawn at the latest by April 2026.

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 12217-2:2017.

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## Endorsement notice

The text of ISO 12217-2:2022 has been approved by CEN as EN ISO 12217-2:2025 without any modification.

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**Small craft — Stability and buoyancy  
assessment and categorization —**

**Part 2:  
Sailing boats of hull length greater  
than or equal to 6 m**

*Petits navires — Évaluation et catégorisation de la stabilité et de la flottabilité —*

*Partie 2: Bateaux à voiles d'une longueur de coque supérieure ou égale à 6 m*



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# Contents

Page

<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
3.1 Primary.....	2
3.2 Hazards.....	4
3.3 Downflooding.....	4
3.4 Dimensions, areas and angles.....	5
3.5 Condition, mass and volume.....	6
3.6 Other terms and definitions.....	9
<b>4 Symbols</b> .....	<b>12</b>
<b>5 Procedure</b> .....	<b>13</b>
5.1 Maximum load.....	13
5.2 Sailing or non-sailing.....	13
5.3 Tests, calculations and requirements to be applied.....	13
5.4 Variation in input parameters.....	14
<b>6 Requirements for monohull boats</b> .....	<b>14</b>
6.1 Requirements to be applied.....	14
6.2 Downflooding.....	15
6.2.1 Downflooding openings.....	15
6.2.2 Downflooding height.....	18
6.2.3 Downflooding angle.....	19
6.3 Recess size.....	19
6.3.1 Application.....	19
6.3.2 Simplified methods.....	20
6.3.3 Direct calculation method.....	22
6.4 Minimum righting energy.....	22
6.5 Angle of vanishing stability.....	23
6.5.1 General.....	23
6.5.2 Normal requirement.....	23
6.5.3 Alternative requirement for design category B.....	23
6.6 Stability index (STIX).....	24
6.6.1 Method.....	24
6.6.2 Dynamic stability factor (FDS).....	25
6.6.3 Inversion recovery factor (FIR).....	25
6.6.4 Knockdown recovery factor (FKR).....	25
6.6.5 Displacement-length factor (FDL).....	26
6.6.6 Beam-displacement factor (FBD).....	26
6.6.7 Wind moment factor (FWM).....	26
6.6.8 Downflooding factor (FDF).....	27
6.6.9 Calculation of the stability index (STIX).....	27
6.7 Knockdown-recovery test.....	27
6.8 Wind stiffness test.....	28
6.8.1 General.....	28
6.8.2 Practical test.....	28
6.8.3 Compliance by calculation.....	30
6.8.4 Requirements.....	31
6.9 Flotation requirements.....	32
6.10 Capsize-recovery test.....	32
6.11 Detection and removal of water.....	34
<b>7 Requirements for catamarans, trimarans and form-stable monohulls</b> .....	<b>35</b>

7.1	Requirements to be applied.....	35
7.2	Downflooding openings.....	35
7.3	Downflooding height.....	35
7.4	Recess size.....	35
7.5	Stability information.....	35
7.6	Safety signs.....	36
7.7	Bare poles factor.....	37
7.8	Rolling in breaking waves.....	37
7.9	Pitchpoling.....	38
7.10	Diagonal stability.....	38
7.11	Habitable multihull boats.....	38
7.12	Buoyancy when inverted.....	40
7.13	Escape after inversion.....	41
<b>8</b>	<b>Safety signs.....</b>	<b>42</b>
<b>9</b>	<b>Application.....</b>	<b>42</b>
9.1	Deciding the design category.....	42
9.2	Meaning of the design categories.....	42
	<b>Annex A (normative) Full method for required downflooding height.....</b>	<b>44</b>
	<b>Annex B (normative) Methods for calculating downflooding angle.....</b>	<b>46</b>
	<b>Annex C (normative) Determining the curve of righting moments.....</b>	<b>48</b>
	<b>Annex D (normative) Method for calculating reserve of buoyancy after inversion or swamping.....</b>	<b>51</b>
	<b>Annex E (normative) Flotation material and elements.....</b>	<b>53</b>
	<b>Annex F (normative) Information for the craft's owner's manual.....</b>	<b>55</b>
	<b>Annex G (normative) Determination of safe wind speed information.....</b>	<b>59</b>
	<b>Annex H (normative) Determination of longitudinal righting characteristics.....</b>	<b>62</b>
	<b>Annex I (informative) Summary of requirements.....</b>	<b>65</b>
	<b>Annex J (informative) Worksheets.....</b>	<b>68</b>
	<b>Annex K (informative) Illustration of recess retention level.....</b>	<b>87</b>
	<b>Bibliography.....</b>	<b>88</b>

## 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](http://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](http://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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 188, *Small craft*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 464, *Small Craft*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 12217-2:2015), of which it constitutes a minor revision. The main changes are as follows:

- the Normative references have been updated;
- the “allowance for the maximum mass of optional equipment and fittings not included in the manufacturer’s basic outfit” has been moved from [3.5.4](#) (maximum load) to [3.5.5](#) (maximum load condition);
- in [Clause F.1](#), the first paragraph has been slightly reworded as a Note, so as to clearly make an informative reference to ISO 10240, which has been moved from [Clause 2](#) to the Bibliography;
- in [Annex J](#), the calculation worksheet No. 1 has been corrected to reflect the changes in [3.5.4](#) and [3.5.5](#);
- minor editorial changes throughout the document.

A list of all parts in the ISO 12217 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](http://www.iso.org/members.html).

## Introduction

This document enables the determination of limiting environmental conditions for which an individual boat has been designed.

It enables the boat to be assigned to a design category appropriate to its design and maximum load. The design categories used align with those in the Recreational Craft Directive of the European Union, EU Directive 2013/53/EU.

[Annex J](#) provides worksheets to assist in the systematic assessment of a boat according to this document.

# Small craft — Stability and buoyancy assessment and categorization —

## Part 2:

## Sailing boats of hull length greater than or equal to 6 m

**CAUTION** — Compliance with this document does not guarantee total safety or total freedom of risk from capsizing or sinking.

**IMPORTANT** — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.

### 1 Scope

This document specifies methods for evaluating the stability and buoyancy of intact (i.e. undamaged) boats. The flotation characteristics of boats susceptible to swamping are also encompassed.

The evaluation of stability and buoyancy properties using this document will enable the boat to be assigned to a design category (A, B, C or D) appropriate to its design and maximum load.

This document is principally applicable to boats propelled primarily by sail (even if fitted with an auxiliary engine) of 6 m up to and including 24 m hull length. However, it can also be applied to boats less than 6 m if they are habitable multihulls or can be applied if they do not attain the desired design category specified in ISO 12217-3 and they are decked and have quick-draining recesses which comply with ISO 11812.

In relation to habitable multihulls, this document includes assessment of susceptibility to inversion, definition of viable means of escape and requirements for inverted flotation.

This document excludes:

- inflatable and rigid-inflatable boats covered by the ISO 6185 series, except for references made in the ISO 6185 series to specific clauses of the ISO 12217 series;
- gondolas and pedalos;
- surfboards including sailing surfboards; and
- hydrofoils and foil stabilized boats when not operating in the displacement mode.

**NOTE** Displacement mode means that the boat is only supported by hydrostatic forces.

It does not include or evaluate the effects on stability of towing, fishing, dredging or lifting operations, which need to be separately considered if appropriate.

### 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 2896:2001, *Rigid cellular plastics — Determination of water absorption*

ISO 3864-1:2011, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 8666:2020, *Small craft — Principal data*

ISO 9093, *Small craft — Seacocks and through-hull fittings*

ISO 9094, *Small craft — Fire protection*

ISO 11812, *Small craft — Watertight or quick-draining recesses and cockpits*

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

ISO 12217-1:2022, *Small craft — Stability and buoyancy assessment and categorization — Part 1: Non-sailing boats of hull length greater than or equal to 6 m*

ISO 14946:2021, *Small craft — Maximum load capacity*

ISO 15083, *Small craft — Bilge-pumping systems*

### 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/>

NOTE The meanings of certain symbols used in the definitions are given in [Clause 4](#).

#### 3.1 Primary

##### 3.1.1

##### **design category**

description of the sea and wind conditions for which a boat is assessed to be suitable

Note 1 to entry: See also [9.2](#).

##### 3.1.2

##### **sailing boat**

boat for which the primary means of propulsion is by wind power, having *reference sail area* ([3.4.8](#))  
 $A_S \geq 0,07(m_{LDC})^{2/3}$

Note 1 to entry:  $m_{LDC}$  is the mass of the boat in the maximum load condition, expressed in kilograms.

##### 3.1.3

##### **catamaran**

boat with two main load-bearing hulls

EXAMPLE Boats with a centreline or bridge-deck nacelle which supports less than 30 % of the mass in the maximum load condition are considered to be catamarans. Proas are asymmetric catamarans.

##### 3.1.4

##### **trimaran**

boat with a centre main hull and two sidehulls in which the centre hull, when the boat is upright, supports 30 % or more of the mass in the maximum load condition