

Oceanic and Offshore Committee

Offshore Special Regulations

3.04 Stability – Monohulls

A submission from the Stability Working Group

Purpose or Objective

The purpose of this proposal is to restore requirements which were lost due to a submission which was accepted at the 2024 conference, and informative wording that was lost when the 2024-2025 Offshore Special Regulations were published.

Proposal

	3.04 Stability – Monohulls																
Mo0,1	3.04.1	a) Compliant with <u>ISO</u> 12217-2 ^a design category A, or . <u>Where this compliance cannot be demonstrated, the boat may meet</u> the requirements of <u>OSR</u> 3.04.2 or <u>OSR</u> 3.04.3.															
Mo2		b) Compliant with <u>ISO</u> 12217-2 ^a design category A, or . <u>Where this compliance cannot be demonstrated, the boat may meet</u> the requirements of <u>OSR</u> 3.04.2, <u>OSR</u> 3.04.3 or <u>OSR</u> 3.04.4.															
Mo3		c) Compliant with <u>ISO</u> 12217-2 ^a design category B, or higher or the requirements of <u>OSR</u> 3.04.2, <u>OSR</u> 3.04.3 or <u>OSR</u> 3.04.4.															
Mo0,1,2,3		^a This can be demonstrated either by EC Recreational Craft Directive certification having obtained the CE mark or by the designer's declaration. The latest effective version of <u>ISO</u> 12217-2 should be used unless the boat was already designed to a previous version.															
Mo0,1,2,3	3.04.2	Table 2 – STIX, AVS and m*AGZ <table><tr><th>Race Category</th><th>0,1,2</th><th>3</th></tr><tr><td>minimum <u>ISO</u> 12217-2 Stability Index (STIX)</td><td>32</td><td>23</td></tr><tr><td>minimum <u>ISO</u> 12217-2 Angle of Vanishing Stability (AVS)</td><td>130- 0.002*m^b</td><td>130- 0.005*m^b</td></tr><tr><td>but AVS always >=</td><td>100°</td><td>95°</td></tr><tr><td>a minimum righting energy m*A_{GZ} (where A_{GZ} is the positive area under the righting lever curve in the minimum operating condition, expressed in kg metre degrees from upright to AVS)</td><td>172000</td><td>57000</td></tr></table>	Race Category	0,1,2	3	minimum <u>ISO</u> 12217-2 Stability Index (STIX)	32	23	minimum <u>ISO</u> 12217-2 Angle of Vanishing Stability (AVS)	130- 0.002*m ^b	130- 0.005*m ^b	but AVS always >=	100°	95°	a minimum righting energy m*A _{GZ} (where A _{GZ} is the positive area under the righting lever curve in the minimum operating condition, expressed in kg metre degrees from upright to AVS)	172000	57000
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		^b <u>where “m” is the mass of the boat in the minimum operating condition as defined by ISO 12217-2.</u> <i>For the sake of brevity, the rest of 3.04 has been omitted.</i>															

Current Position (as accepted at the 2024 annual conference)

	3.04 Stability – Monohulls																
Mo0,1	3.04.1 a)	Compliant with <u>ISO</u> 12217-2 ^a design category A, or the requirements of <u>OSR</u> 3.04.2 or <u>OSR</u> 3.04.3.															
Mo2	b)	Compliant with <u>ISO</u> 12217-2 ^a design category A, or the requirements of <u>OSR</u> 3.04.2, <u>OSR</u> 3.04.3 or <u>OSR</u> 3.04.4.															
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Current Position (as published for 2024-2025)

	3.04 Stability – Monohulls							
Mo0,1,2	3.04.1 a)	Able to demonstrate compliance with ISO 12217-2* design category A or higher, either by EC Recreational Craft Directive certification having obtained the CE mark or the designer's declaration						
Mo3	b)	A boat shall be able to demonstrate compliance with ISO 12217-2* design category B or higher, either by EC Recreational Craft Directive certification having obtained the CE mark or the designer's declaration						
Mo0,1,2,3		* The latest effective version of <u>ISO</u> 12217-2 should be used unless the boat was already designed to a previous version.						
Mo0,1,2,3	3.04.2	Where compliance in accordance with <u>OSR</u> 3.04.1 cannot be demonstrated, a boat shall be able to demonstrate either:						
Mo0,1,2,3		Table 2 – STIX, AVS and m*AGZ Requirements						
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Mo0,1,2,3
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Mo0

or

Table 3 – ORC Stability Index or SSS Requirements

b)

Race Category	0	1	2	3
minimum Stability Index in <u>ORC</u> Rating System, or	120	115	110	103
minimum IRC Safety and Stability Screening numeral (SSS) Base value	35		28	15
SSS may only be used if the series date is before			1995	2000

3.04.3 A boat shall be capable of self-righting from an inverted position with or without reasonable intervention from the crew and independent of the condition of the rig.

Reasons

1. In the Offshore Special Regulations as published in 2024-2025, under 3.04.1 a boat shall meet the stated ISO 12217-2 category.
2. Since ISO 12217-2 is not required by all countries, nor did it apply before the standard was introduced, 3.04.2 offers alternatives for compliance.
3. In the process of addressing other issues, the submissions made by the stability working party inadvertently removed the aforementioned hierarchy. This proposal restores the hierarchy.
4. During the Offshore Special Regulations refinement, the refinement working party inadvertently removed the description for minimum sailing mass “m”. This proposal restores that description. An example from 2022-2023 follows.

From the 2022-2023 publication

Mo0,1,2

3.04.2 a) ii

AVS not less than 130 - 0.002*m, but always >= 100°, (where “m” is the mass of the boat in the minimum operating condition as defined by ISO 12217-2); and