Effective: 01.03.2005

Issue 6.

Zoom 8

Class Rules

Rules made in accordance with the ISAF One-Design Class Rules Standards

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The Zoom 8 was designed in 1991 by Henrik Segercrantz, Finland, and was recognised by ISAF in 2002.

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SECTION A – FUNDAMENTAL RULES

A.0 Objective of these Rules

A.0.1 The Zoom 8 is a Strict One-Design Dinghy. The intention of these Rules is that the boats shall be as alike as possible in all respects affecting performance in order that the true test, when raced, is between crews and not boat or equipment.

A.1 One-Design Clause

A.1.1 Anything not specifically permitted by these Class Rules is PROHIBITED.

A.2 Abbreviations

A.2.1 **ISAF** International Sailing Federation
MNA ISAF Member National Authority
IZCA Zoom 8 International Class Association
NCA National Zoom8 Class Association
ICF International Class Fee
OAR Owner of All Rights to the Design and Brand name
MC Measurement Certificate
RRS International Yacht Racing Rules (Racing Rules of Sailing)
LBP Licensed Builders Plaque
ERS Equipment Rules of Sailing

A.3 Authority

A.3.1 The authority of the Class is IZCA, which will cooperate with ISAF in all matters concerning these Class Rules. All final ruling concerning these Class Rules, the Measurement Diagrams, the Appendix, Measurement, and the Building Specifications shall be approved by ISAF.

A.3.2 Neither the ISAF, an MNA, the IZCA, an NCA nor a requested measurer is under any legal responsibility in respect of these Class Rules or accuracy of measurement and no claim arising from them can be entertained.

A.4 Language

A.4.1 The official language of the Class is English and in case of dispute over a translation the English text shall govern.

A.4.2 The word “shall” is mandatory and the word “may” is permissive.

A.5 Class Rules and their Interpretations

A.5.1 Whenever in these Rules the words “Class Rules” are used, they shall be taken as including the Measurement Diagrams and the Appendix, Measurement.

A.5.2 In case of discrepancy between these Rules, the Measurement Diagrams, the Appendix, Measurement or the Building Specifications, the matter shall be referred to the MNA or the ISAF as stated in A.3.1.

A.5.3 Any interpretation of Class Rules required at an event may be made by an International Jury, constituted in accordance with ***RRS***. In this case, the jury shall consult the event chief measurer. Such interpretation shall only be valid during the event, and the organising authority shall, as soon as practical after the event, inform the ISAF and IZCA of such an interpretation.

A.5.4 All measurements have a tolerance of ± 5 mm unless otherwise stated in these Rules.

SECTION B - ORGANISATION

B.1 Administration of the Class

B.1.1 The MNA may delegate part or all of its functions, as stated in these Class Rules, to an NCA.

B1.2 In countries where there is no MNA, its functions as stated in these Class Rules shall be carried out by the IZCA, which may delegate the administration to an NCA.

B.2 International Class Fee / Plaque and the Licensed Builder’s Plaque

B.2.1 The ICF shall be paid by the Licensed Builder to ISAF who shall, after having received the ICF, provide the builder with the ISAF plaque.

B.2.2 All dinghies shall to be equipped with a unique LBP, provided by the OAR, stating the name of the builder and the CE-certification or other needed safety organ in the country of production. No dinghy not showing this plaque firmly attached to its cockpit may be measured or accepted by an MNA as a Zoom 8 Racing Dinghy.

B.3 Sail Numbers

B.3.1 The sail number shall be issued by the MNA, who shall inform the NCA of the names and addresses of the owners as well as the sail number.

B.3.2 The sail numbering is based on a national sail numbering system starting from number 1. Alternatively, an owner may be allotted a personal sail number by the MNA, which may be used on all his/her yachts in the Class.

B.4 Measurers

B.4.1 Fundamental measurement (measurement required by the Class Rules) shall only be carried out at the Licensed Builder's premises by a measurer recognised by the MNA in the country where the measurement takes place.

B.4.2 A measurer shall not measure any part owned, designed, or built by him, or in which he is an interested party, or has a vested interest, except where permitted by these Class Rules.

B.4.3 Each MNA/NCA may appoint one or more indoor measurers to carry out the Fundamental Measurement at a Licensed Builder's premises.

B.4.4 If a measurer is in any doubt as to the legality of any part he shall consult the MNA before signing the MC.

B.5 Measurement Certificates

B.5.1 The owner shall present the MC issued together with a receipt of evidence that the NCA fee has been paid to the MNA together with any registration fee that may be required.

B.5.2 Upon receipt of a correctly completed MC and given proof of that the sailor is currently a member of a sailing club/member of the MNA, the MNA shall issue a sail number. The MNA/NCA shall always retain a copy of the MC.

B.5.3 Notwithstanding anything contained herein, the MNA may withdraw an MC and shall do so on request of the ISAF. Upon request, an owner is to return the MC to the MNA.

B.5.4 The LBP, stated in B.2.3 shall be permanently fixed, upon approval by the recognised measurer, on port side in the aft end of the cockpit.

B.6 Change of Ownership

B.6.1. Change of ownership invalidates the MC, but may not necessitate re-measurement. The new owner shall apply to the MNA/NCA for a new MC, returning the old certificate with any registration fee that may be required. A new MC shall then be issued to the new owner.

B.7 Amendments to Class Rules

B.7.1 Amendments to these Rules shall be approved by each of:

a) NCA
b) IZCA
d) ISAF who will have the final ruling

B.7.2 Amendments of these Rules shall be approved by at least two thirds of the members in the NCA, replying in writing to the IZCA in response to a postal or electronic ballot published by them. Only those postal votes returned within two months from date of publication of the rule change shall be presented to ISAF for a final ruling.

SECTION C – CONDITIONS FOR RACING

C.1 Equipment

C.1.1 General

a) Only equipment endorsed in accordance with these Class Rules shall be used.
b) Any safety equipment required by an international, national or other governing authority for safety purposes may be fitted or carried.

C.1.2 Mandatory

a) A towing line must be attached to the bulls eye in the bow at all times when racing. The line shall of a floating type and shall have a diameter of not less than 6 mm and length not less than 5 m unless otherwise prescribed by the Race Committee. The towing line shall have a nominal braking strength of not less than 300 kg equal to 2940 N.
b) A shock cord arrangement of the type and dead ends as supplied by the builder shall at all times while racing be used in order to keep the dagger board in place when capsizing.
c) The mast shall at all times while racing be fixed to the hull with the Cunningham in order to keep it in place if capsizing.
d) The hiking straps shall at all times when racing be functional and fixed in both ends as supplied by the builder.
e) A red protest flag shall be attached between the deck and the aft side of the mast and a point on the bottom edge of the boom in a distance not more 760 mm from the mast.

C.1.3 Optional

a) One compass is permitted mounted on any part of the deck or in the cockpit provided that the hull cavity is not pierced by anything other than the fasteners. The compass shall not be fitted to the inspection ports.
b) No electronic equipment for determination of speed, true course or position, or any alike equipment, may be carried or added as a function to the compass.
c) Electronic timing devices are allowed.

d) Wind indicators may be attached as desired provided that the sail is not cut and the buoyancy of the hull and mast are not impaired.
e) Clips, ties or bags to stow or secure safety or other equipment may be used on the deck, at the inspection ports, or in the cockpit.
f) Non-slip tape may be applied at the deck and in the cockpit.
g) The use of ropes, lines, plastic flexible adhesive tape or similar is permitted to secure shackles, pins and clips, to bind sheets, lines and rigging, except what is stated under limitations.
h) The hiking straps may be substituted with any type of non-stretch material and they may be padded.
i) The shock cord attachments to the hiking straps are free.
j) The outhaul line may be prolonged with a line going around the mast to enable outhaul adjustment at all times.
k) The Cunningham may be run through a double line fixed to the boom fitting to cease the force needed for tensioning the luf.
l) The traveller adjustment line may have 1:1 or 1:2 ratio.

C.1.4 Limitations

a) Ropes, lines, flexible adhesive tape or similar shall not be used to construct new fittings or modify the function of the existing fittings.
b) In series of races no more than one sail or item of equipment shall be used except when mentioned in the sailing instructions or when a sail or item of equipment has been damaged beyond repair. Such replacement may be made only with the approval of the Race Committee.

C.1.5 Additional Rules

a) The rudder blade shall be maintained in the full down i.e. vertical position except when exceptions to this rule is prescribed by the Race Committee for racing in shallow waters.
b) All inspection port covers and the drainage plug shall be in place and tight while racing.

C.2 Buoyancy

C.2.1 All three buoyancy bags inside the hull shall be filled with air at all times when racing.

C.3 Flotation

No restrictions.

C.4 All-Up Weight

C.4.1 The all-up weight of the dinghy in racing condition, excluding all optional equipment, shall not be less than 48 kg.

C.5 Setting of Sails

C.5.1 The sail shall be set so that the highest visible point of the sail at the head does not exceed the top of the mast.

C.6 Crew

C.6.1 The Zoom 8 shall be raced with either one or two persons aboard.

C.7 Advertising

C.7.1 Advertising is permitted in accordance with ISAF Regulation 26 as Category C.

C.8 Certificate

C.8.1 The dinghy shall have been granted an MC by its MNA in the owner's name.

C.8.2 Any dinghy owned by a MNA member club, registered as a member in the NCA, which has been granted an MC in the clubs name, may appoint its members to use their dinghy in any race.

C.9 Membership

C.9.1 No person is permitted to race a Zoom 8 in any fleet, inter-fleet, district or other sanctioned event unless at least one member of the crew is a member of the NCA.

C.9.2 The NCA may issue a temporary membership to such a sailor who is appointed a Wild Card (a dinghy free of charge for one specific event) by the organisers of a national or international event.

C.9.3 If a sailor does not have a NCA in his own country, his/her membership application will be appointed to the IZCA, who will adopt the sailor as a temporary member until such a time when the NCA in the country in question has been formed.

C.10 Additional Rules

C.10.1 See section 1 Appendix Measurements.

C.10.2 One watertight inspection port not exceeding 152 mm internal diameter may be installed on the foredeck for access to the hull cavity.

C.10.3 Cushions or similar which are attached to the shell of the dinghy are prohibited.

C.10.4 Regarding clothing, R.R.S. shall apply except that

a) Fabric weight jackets and water pockets, compartments or containers in or attached to clothing or equipment are not permitted.
b) The total weight of clothing and equipment worn by a competitor, excluding footwear, shall not be capable of exceeding 11,o kg when soaked with water and weighed as provided in the R.R.S.

SECTION D – HULL AND DECK

D.1 Measurements and Endorsements

D.1.1 The hull and deck shall be joined and conform to the Class Rules in force at the time of fundamental measurement. Alternations or repairs shall be in accordance with the current Class Rules.

D.1.2 The fundamental measurement procedure is presented in the Builders Manual chapter B3.

D.1.3 If IZCA has forwarded Fundamental Measurement Templates for measuring the hull, deck or any specific part of the dinghy, then these have to be used at the Fundamental Measurement.

D.1.4 The hull and deck shall be fundamentally measured and measurer is to issue a MC before the dinghy leaves the builder's premises. In case of measurement dispute, C.10.1 is applied.

D.1.5 Repairs and preventive maintenance to the hull, deck or any fittings and fixings may be carried out without violation of these Rules provided such repairs are made in such a way that the essential shape characteristics or function of the original are not affected.

D.2 Builders

D.2.1 Hull builders shall be licensed and trained in the production of the dinghy by the OAR and proven their skill being registered as Licensed Zoom 8 builders by all MNA.

D.2.2 The Licensed builder shall, at his own expense, correct or replace any dinghy that does not comply with the Class Rules as a result of an omission or error by the builder.

D.2.3 The Zoom 8 shall display a LBP obtained from the OAR fixed in the rear port side of the cockpit as stated in B.2.3.

D.2.4 All dinghies shall be produced from moulds taken from the Master Moulds or their substitute approved by both the OAR and the ISAF.

D.3 Hull Shell

D.3.1 Materials

a) The hull and deck shall be built in accordance with the Builders Manual.
b) Construction shall be of approved glass reinforced polyester resin, GRP. Where distance material is used, it shall be of Coremat-type or equal. The use of fibres other than glass is prohibited. The use of epoxy or vinylester in the hull or deck is prohibited.

c) The deck shall be assembled with the hull in an approved hull mould.

D.3.2 Dimensions

The hull and deck dimensions shall be in accordance with the Appendix, Measurement.

D.3.3 Weights

a) The complete Zoom 8 hull, including deck and fixed fittings shall be weighted. The weight shall be minimum 38 kg.
b) Corrector weight of lead with a maximum weight of 4 kg may be permanently fixed to the inside of the main bulkhead at the centreline above the centreboard case.

D.4 Deck

D.4.1 Rules as in D.3.

D.5 Hull Additions

D.5.1 Additional bulkheads and thwarts are not permitted.

D.5.2 Buoyancy

The hull and deck mouldings comprise one large buoyancy compartment. No additional holes, but for a 5 mm breathing hole placed in upper back part of the outer drum case and what is stated in C.10.2 is permitted.

D.6 Additional Rules

D.6.1 Polishing and painting is permitted.

SECTION E – HULL APPENDAGES

E.1 Measurements and Endorsements

E.1.1 All hull appendages shall conform to the Class Rules in force at the time of fundamental measurement. Alternations or repairs shall be in accordance with the current Class Rules.

E.1.2 An MNA may, after consulting with the IZCA, approve one or more individuals at a builder to measure hull appendages produced by that builder. A license shall be issued for that purpose.

E.1.3 Measurement shall be taken in accordance with the Measurement Diagrams and Appendix, Measurement.

E.1.4 The rudder blade and the dagger board made of epoxy coated Abache or heavier wood shall carry an official sticker showing the Licensed Producers name and running number of the product.

E.1.5 Repairs and preventive maintenance to hull appendages or any fittings and fixings may be carried out without violation to these Rules provided such repairs are made in such a way that the essential shape characteristics or function of the original are not affected.

E.2 Builders

E.2.1 The OAR shall license Hull appendage builders.

E.2.2 The Licensed builder shall, at his own expense, correct or replace any hull appendage that do not comply with the Class Rules as a result of an omission or error by the builder.

E.2.3 The builder of plywood dagger board and rudder blade is free.

E.3 Dagger Board and Rudder Blade

As the dagger board and rudder blade strength and bending abilities strongly affects the performance of the dinghy, all producers of the same in epoxy laminated wood have to be licensed by the OAR and approved by ISAF in order to guaranty equal bending and strength abilities. The measurement tolerances are intended to allow for necessary manufacturing tolerances and shall not be used to alter the design.

E.3.1 Materials

The dagger board and rudder blade shall be manufactured of water resistant plywood or of epoxy coated Abache or heavier wood with a thickness of 13 ± 1 mm in accordance with the Measurement Diagrams.

E.3.2 Dimensions

The dimensions shall be in accordance with the Measurement Diagrams.

E.4 Rudder Head

The rudder head and the placing of its fittings and equipment shall conform to the Measurement Diagrams. The measurement tolerances are intended to allow for necessary manufacturing tolerances and shall not be used to alter the design.

a) Materials
The rudder head shall be of epoxy-laminated wood or of a composite type as provided by the Licensed Builder.

b) Additional Fittings
A line or pintle may be fitted to the rudder head to prevent the rudder blade to pivot from its desired position. (i.e. vertical and horizontal).

E.5 Tiller and Tiller Extension

a) Materials
The tiller shall be of epoxy-laminated wood or of a composite type as provided by the Licensed Builder.
b) The tiller has to be fixed to the rudder head in a sturdy manner.
c) The tiller extension is free.

SECTION F – RIG

F.1 Measurements and Endorsements

F.1.1 A spar and its rigging shall conform to the Class Rules in force at the time of fundamental measurement. Alternation or repairs shall be made in accordance with the current Class Rules.

F.1.2 Measurements shall be taken in accordance with the Measurement Diagrams and Appendix, Measurement.

F.1.3 The rig dimensions, the placing of fittings and equipment shall conform to the Measurement Diagrams.

F.2 Manufacturers

F.2.1 A rig builder is any manufacturer licensed by the OAR and approved by ISAF to build and supply the Zoom 8 rig in accordance with the Zoom 8 Design Specifications.

F2.2 The IZCA may, after consulting with the ISAF/MNA, approve one or more individuals at a spar manufacturer to measure spars produced by that manufacturer. A License shall be issued for this purpose

F 2.3 The Licensed rig builder shall at his own expense, correct or replace any rig items that do not comply with the Class Rules as a result of an omission or error by the builder.

F.3 Mast

a) The mast shall only be supplied by an OAR Licensed Builder.
b) The mast is a one-piece or two-piece mast of sailboard type, specifically designed for the Zoom 8 with needed material strengthening for strength and correct bending curve.
c) Each produced mast shall be fitted with an engraved manufacturers identification code and/or a running serial number to be able to be recognised as a Zoom 8 Strict-One-Design mast.

F.3.1 Materials

The mast shall be of rolled GRP as manufactured by an OAR and ISAF Licensed Builder.

F.3.2 Fittings

a) The Boom fitting specially designed for the Zoom 8 dinghy has to be provided by a Licensed Builder.
b) To prevent abrasion at the deck collar the mast foot and goose neck area, a tube or tape collar of uniform thickness not exceeding 1 mm may be placed around the entire circumference of the mast. The height shall not exceed 110 mm.
c) A disc of uniform thickness not exceeding 1 mm in thickness may be placed under the mast foot in the hull.
d) The mast shall be sealed to prevent water from entering into the mast when capsizing. The seal shall not, however, influence the bending properties of the mast.

F.3.3 Dimensions

a) As supplied by a Licensed Builder.
b) The mast shall be hollow, except what is stated in F.3.2.c.

F.4 Boom

A Licensed Builder shall supply the boom.

F.4.1 Materials

The boom shall be constructed of black anodised aluminium alloy .

F.4.2. Fittings

a) The length of the mainsheet wire or line, fixed at the boom, shall not when tensioned by the sheet get further at its deepest point between boom and upper side line than 100 mm. The mainsheet block shall be placed directly on the line or with a shackle or a snap-hook. Centre of the block sheave may not be more than 230 mm below lower edge of the boom. All fittings as stated in the Measurement Diagrams.

b) The bull's eye on starboard side off the boom in the clew corner may be replaced with a block with a block with a maximum sheave diameter of 25 mm and a similar block may be fitted in front of the clam cleat. The cleat may be turned around to alter the tensioning direction.

F.4.3 Dimensions

The boom shall have a uniform round section with an outer diameter of 38 ± 0,5 mm and a wall thickness of 2 ± 0,2 mm .

F.5 Spinnaker Boom

No spinnaker or spinnaker boom is allowed.

F.6 Standing Rigging

No standing rigging is allowed.

F.7 Running Rigging and Fittings

a) The running rigging, fittings and the placing of fittings shall conform to the Measurement Diagrams. The Measurement tolerances are intended to allow for necessary manufacturing tolerances and shall not be used to alter the design.
b) Any sheets or lines supplied by the builder may be substituted with sheets or lines of the same standard diameter of any length or material except that:
    i. each sheet or line shall be of one continuous length of uniform diameter but for the outhaul line as stated in C.1.3.i.
    ii. Wire is permitted only for supporting the mainsheet single block with becket at the boom and the kicking strap, as supplied by the builder.
c) The blocks, swivel jammer or main sheet jammer, jamming blocks and blocks, cam cleats and the clam cleat may be replaced by any type of similar fitting of the same principal design and same standard dimension as supplied by the builder. Type of block bearings is not restricted.
d) The shackles may be replaced by other type of shackles or by quick-release hooks.
e) A block, may be attached to the eyelet in the clew corner and a single block or double block of the same size at the Cunningham eyelet to decrease abrasion and ease the tensioning of the sail. The make and the size of the blocks is free.
f) A block, may be attached to the mast at a point not lower than 400mm from the foot of the mast for easing the tensioning strength of the Cunningham. Alternatively, one of the existing Cunningham blocks on the deck may be exchanged to a double block of similar size. The make of the block is free.

F.7.1 Materials

As supplied by the builder or of a similar kind.

F.7.2 Dimensions

a) The standard diameter of the main sheet is 8 - 10 mm.
b) The standard diameters of all other lines is 5 – 6 mm.

SECTION G – SAILS

G.1 Measurements and Endorsements

G.1.1 The sail shall conform to the Class Rules in force at the time when it was first measured. Alternations or repairs shall be in accordance with the current Class Rules.

G.1.2 An MNA may, after consulting with the IZCA approve one or more individuals at a sail loft to measure sails produced by the loft. A license shall be issued for this purpose.

G.1.3 Sails shall be made and measured in accordance with the ISAF Sail Measurement Rules, except where varied herein.

G.1.4 Sails shall carry an official measurement stamp or sticker near the tack.

G.1.5 Substantially altered or repaired sails shall be re-measured and the measurer shall attach a new official measurement stamp or sticker showing the new date of measurement.

G.2 Sailmaker

G.2.1 A sailmaker is a manufacturer licensed by the OAR and accepted by ISAF to build and supply the Zoom 8 sail in accordance with the Zoom 8 Design Specifications.

G.2.2 All sails produced by a Licensed Sailmaker have to be cut using templates and / or computer based cutting programs for laser cutting provided by the OAR and no alternations to these are allowed.

G.2.3 All reinforcements produced by a Licensed Sailmaker for use in the Zoom 8 sail, both primary and secondary, have to be cut using templates and / or computer based cutting programs for laser cutting provided by the OAR and no alternations to these are allowed.

G.2.4 Primary reinforcements have to be cut using the Zoom 8 sailcloth specifically produced for the Zoom 8 sail and provided by the OAR.

G.2.5 The Licensed Sailmaker shall, at his own expense, correct or replace any sail that does not comply with the Class Rules as a result of an omission or error by the sailmaker.

G.3 Mainsail

The sail, battens and the placing, size and form of fittings shall conform to the measurement Diagrams. The Measurement tolerances are intended to allow for necessary manufacturing tolerances and shall not be used to alter the design.

G.3.1 Construction

a) The construction shall be: Medium tempered, single ply
b) The body of the sail shall throughout consist of a specifically for the Zoom 8 dinghy produced woven ply of polyester provided by the OAR.

c) The sail shall have three batten pockets of even length.
d) The following is permitted: Stitching, gluing, tapes, corner eyes, cunningham eye, corner pulleys, one window, sailmaker label, royalty label, measurement stamp or button, tell tales.

G.3.2 Dimensions

a) Dimensions according to the Measurement Diagram.
b) Sail ply as stated in G.3.1.b. of 140 g/m² ± 10 g/m².

G.4 Headsails

No headsails are allowed

G.5 Spinnakers

No spinnakers are allowed

G.6 Identification Marks

G.6.1 The Class insignia and the sail numbers and letters shall be in accordance with the RRS except where varied herein.

G.6.2 The numbers shall be of the following minimum dimensions:

Height 230 mm

Space between adjoining numbers 40 mm

G.6.3 The Class insignia shall conform to the dimensions and requirements as detailed in the Measurement Diagrams.

G.6.4 The Class insignia may be displayed on only starboard side of the sail, and when displayed on the port side show a mirror face of the insignia placed at same place as on the starboard side.

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SECTION 1 – Appendix, MEASUREMENTS

In the case of a measurement dispute on the hull, spars, sails, dagger board and rudder blade, rigging, type of fittings and equipment and the placing of same not explicitly covered by these Rules, Measurement Diagrams and Appendix, Measurement, the following procedure shall be adopted:

A sample of 5 other dinghies shall be taken and measured using identical techniques. The dimensions of the disputed dinghy shall be equal to, or between the maximum and minimum dimensions obtained from these 5 dinghies. If the dinghy in question is outside these dimensions the matter, together with any relevant information, shall be referred to the measurer recognised by the MNA, who shall give the final ruling. If any of the dimensions of the sample are considered to be unusual, all relevant information shall be referred to the Chief Measurer of the MNA.

All dimensions shown in millimetre.

MEASUREMENT

1. If a protest is lodged against a yacht alleging that there has been alternations or additions thereto not permitted by the Rules of the Class, and the Race Committee, on investigation, is in doubt as to whether a violation of the Rules has occurred, it shall measure the part of yacht subject to protest in accordance with paragraph 2.

2. (a) Hull

The part of the hull on the yacht subject to protest shall be measured in accordance with the measurement directions attached and the same part of not less than five (5) other dinghies, chosen by the Race Committee as random samples, shall be measured in the same manner. The Race Committee shall select, if possible, Zoom 8 dinghies, which show no evidence of having been repaired or altered.

The arithmetic mean of the measurements of the dinghies chosen, as the sample shall be calculated, and the protested dinghy shall be disqualified if the difference between the mean value so determined and the measurement on the dinghy subject to protest shall exceed the following values for the measurements indicated:

any point along the keel line (rocker)	4 mm
any other area of the hull	5 mm

2. (b) Equipment

If any mast, boom, fitting, dagger board or rudder blade is subject of a protest as to size, shape or location, measurement thereof shall be governed by the drawings and tolerances set forth in the Measurement Diagrams (ref: Rules).

3. Measurement Template

See drawing “template and example of measuring”

4. Measurement of Hull

Turn the dinghy upside down. Starting at the transom, measure out along the keel line and establish point A, which will fall roughly athwart ship of point X, the area under protest.

Lay a straight edge across the transom as shown in the sketch and measure out a distance along the vertical surface of the gunwale and establish point B, which will fall approximately in line with the measured point on the keel line (A) and the area under protest (X). Distances shown are as example only.

See drawing “template and example of measuring”

The centre line of the dinghy must then be established at point A. Mark the centre line at point A. Now measure from point A to point X and retain this figure to establish an equal point of measurement on the five random sample dinghies.

Place the centre of the measurement template on point A, line up the vertical arms with points B and equalise exactly the distance from the horizontal bar to the inside of the gunwale on each side of the dinghy.

Measure the shortest distance from point X up to the vertical bar and record this measurements (50 mm in example).

See drawing “template and example of measuring”

This procedure should now be repeated using all the distances established above and a similar reading obtained for the distances from the hull to the horizontal cross bar on the other five sample dinghies.

Example: Measurement on five sample dinghies		92 mm 90 94 93 <u>91</u> 460 mm
Arithmetic mean	460/5	92 mm
Measurement on protested dinghy		96 mm
Difference		4 mm

This does not exceed the mean value by more than 5 mm therefore protest is disallowed.

Measurement of Rocker

Turn the dinghy upside down. Measure out a straight distance of 2360 mm in the direction of the keel line of the dinghy.

Set up a taught string over the centre line of the dinghy exactly 150 mm above the keel at the transom and 130 mm above the keel at 2360 mm from the transom.

Measure the distance along the keel from transom to point under protest and retain this figure to establish an equal point of measurement on five sample dinghies.

Measure the shortest distance to the string and then repeat procedure with five sample dinghies.

Calculate arithmetic mean of the measurements from five sample dinghies. Point under protest (X) should not deviate by more than 4 mm.

See drawing “template and example of measuring”