Effective date: 19th June 2023

Status: Approved



## Class Rules

# International OK Dinghy Class Association



The OK Dinghy was designed in 1957 by Knud Olsen and was adopted as an International Class in 1972.



## **INDEX**

PAR	Γ I – ADMINISTRATION	C.7	Hull Appendages	10
Secti	on A – General	C.8	Rig	11
A.1	Language 4	C.9	Sails	12
A.2	Abbreviations 4	Secti	ion D– Hull	
A.3	Authorities 4	D.1	Parts	14
A.4	Administration of the Class 4	D.2	General	14
A.5	World Sailing Rules 4	D.3	Hull Shell	15
A.6	Class Rules Variations 4	D.4	Deck	15
A.7	Class Rules Amendments 5	D.5	Buoyancy Tanks &	
8.A	Class Rules Interpretation 5		Bulkheads	15
A.9	International Class Fee and	D.6	Sheerguards	16
	World Sailing Building Plaque 5	D.7	Assembled Hull	16
	Sail Numbers 5	Secti	ion E – Hull Appendages	
	Hull Certification 5	E.1	General	20
	Initial Hull Certification 6	E.2	Centreboard	20
	Validity of Certificate 6	E.3	Rudder, Rudder Blade,	
	Hull Re-Certification 6		Rudder Stock and Tiller	21
A.15	Retention of Certification  Documentation 6	Secti	ion F – Rig	
C4		F.1	General	22
	on B – Boat Eligibility	F.2	Mast	22
B.1	Class Rules and Certification 7	F.3	Boom	24
B.2	Event Limitation Marks7	F.4	Running Rigging	25
PAR	Γ II – REQUIREMENTS AND	Secti	ion G – Sails	
	TATIONS	G.1	General	25
Secti	on C – Conditions for Racing	G.2	Sail	25
C.1	General 8			
C.2	Crew 8	PAR	T III – APPENDICES	
C.3	Personal Equipment 8	H.1	Measurement Diagrams	29
C.4	Advertising 8	H.2	Official Plans	36
C.5	Portable Equipment 9	H.3	Definitions	36
C.6	Hull 9			

## INTRODUCTION

The intention of the OK Dinghy **class rules** is to ensure that the boats are as alike as possible in all respects affecting performance. However, within these rules, variations in the construction of the boats are permitted.

International OK Dinghy hulls, hull appendages, rigs and sails are measurement controlled.

OK Dinghy sails may be measured under World Sailing's In House Certification (IHC) programme.

OK Dinghy hulls, hull appendages, booms and sails may be built by any manufacturer.

OK Dinghy masts shall only be manufactured by a licensed builder except when constructed from wood or aluminium alloy when there is no restriction. These class rules apply to both licenced and un-licenced mast builders.

Owners and crews should be aware that compliance with rules in Section C may NOT be checked as part of the certification process.

Rules regulating the use of equipment during a race are contained in Section C of these **class rules**, in ERS Part I and in the Racing Rules of Sailing.

This introduction only provides an informal background and the International OK Dinghy **class rules** proper begin on the next page.

## PLEASE REMEMBER

THESE RULES ARE **CLOSED CLASS RULES** WHERE IF IT DOES NOT SPECIFICALLY SAY THAT YOU MAY – THEN YOU SHALL NOT.

COMPONENTS, AND THEIR USE, ARE DEFINED BY THEIR DESCRIPTION.

## PART I – ADMINISTRATION

#### Section A - General

#### A.1 LANGUAGE

- A.1.1 The official language of the class is English and in case of dispute over any translation, the English text shall prevail.
- A.1.2 The word "shall" is mandatory and the word "may" is permissive.

#### A.2 ABBREVIATIONS

A.2.1 MNA World Sailing Member National Authority

OKDIA International OK Dinghy Class Association

NCA National Class Association

ERS Equipment Rules of Sailing

RRS Racing Rules of Sailing

IHC In House Certification (World Sailing)

#### A.3 AUTHORITIES

- A.3.1 The international authority of the class is World Sailing, which shall co-operate with the OKDIA in all matters concerning these **class rules**.
- A.3.2 Neither World Sailing, an MNA, the OKDIA, an NCA, a **certification authority** or an **official measurer** are under any legal responsibility in respect of these **class rules** and the accuracy of measurement, nor can any claim arising from these be entertained.
- A.3.3 Notwithstanding anything contained herein, the **certification authority** has the authority to withdraw a **certificate** and shall do so on the request of World Sailing.

#### A.4 ADMINISTRATION OF THE CLASS

- A.4.1 The international administering authority is the OKDIA.
- A.4.2 The **certification authority** shall be the MNA, except that, in countries where there is no MNA or the MNA does not wish to act as **certification authority**, this function may be delegated to the NCA. If there is no NCA or the NCA does not wish to act as **certification authority** this function shall be carried out by the OKDIA
- A.4.3 The national administering authority shall be the NCA. Where the NCA does not wish to administer the class in that country this function shall be carried out by the OKDIA.

#### A.5 WORLD SAILING RULES

- A.5.1 These **class rules** shall be read in conjunction with the ERS.
- A.5.2 Except where used in headings, when a term is printed in "bold" the definition in the ERS applies and when a term is printed in "italics" the definition in the RRS applies.
- A.5.3. The class plans, measurement form and measurement diagram are complementary to these **class rules**.

#### A.6 CLASS RULES VARIATIONS

- A.6.1 At World, Continental or Regional Championships the Notice of Race and/or Sailing Instructions may change the class rules only with the agreement of the OKDIA and World Sailing.
- A.6.2 At National events the Notice of Race and Sailing Instructions may change the class rules only with the agreement of the NCA and the MNA.
- A.6.3 At any other class events, these **class rules** shall not be changed by the Notice of Race and Sailing Instructions.

#### A.7 CLASS RULE AMENDMENTS

A.7.1 Amendments to these **class rules** are subject to the approval of World Sailing in accordance with World Sailing Regulations.

#### A.8 CLASS RULES INTERPRETATIONS

A.8.1 Interpretation of **class rules** or discrepancy between the **class rules**, measurement form and measurement diagram shall be made in accordance with World Sailing Regulations.

#### A.9 WORLD SAILING BUILDING PLAQUE

A.9.1 The builder shall pay the Building Plaque Fee on each **boat** built, whether or not it is subsequently measured and registered. World Sailing Building Plaques may be purchased by the builder from the NCA or from OKDIA when the NCA does not want to administer or where there is no NCA. A receipt shall be issued bearing the same number as the Plaque.

#### A.10 SAIL NUMBERS

- A.10.1 Sail numbers shall be issued by the **certification authority**, or their delegates, on receipt of evidence that the Building Plaque Fee has been paid.
- A.10.2 Sail numbers shall be issued in consecutive order starting at "1".
- A.10.3 In countries where consecutive numbering has not been applied, they shall start from a number approved by the OKDIA.
- A.10.4 Personal Sail Numbers (PSN) may be issued by the NCA of the sailors' MNA. Personal Sail Numbers are additional to the sail numbers issued to all **boats**. If the use of a Personal Sail Number is likely to cause confusion, a Race Committee may require that a **boat** use the sail number issued to that **boat** or another agreed number. The NCA shall issue official OKDIA PSN certificates.

#### A.11 HULL CERTIFICATION

- A.11.1 No **boat** shall take part in *racing* unless it has a valid measurement **certificate** in the owner's name. The measurement **certificate** is only valid if the owner is a current member of a NCA or, if there is no NCA in their nation, a member of the OKDIA.
- A.11.2 A **certificate** shall record the following information:
  - (a) Class.
  - (b) Certification authority.
  - (c) Sail number issued by the certification authority.
  - (d) World Sailing Building Plague number.
  - (e) Owner.
  - (f) Craft identification number (CIN) where appropriate.
  - (g) Builder/Manufacturers details.

- (h) Date of issue of initial certificate.
- (i) Name of the original measurer.
- (j) Date of issue of current certificate.
- (k) Total weight of the hull as measured in C.6.1.
- (I) Total weight of corrector weights.
- (m) Signature of owner.

#### A.12 INITIAL HULL CERTIFICATION

- A.12.1 For a **certificate** to be issued to a **hull** not previously **certified**:
  - (a) **Certification control** shall be carried out by the **official measurer** who shall complete the appropriate documentation.
  - (b) The documentation and **certification** fee, if required, shall be sent to the **certification authority**.
  - (c) Upon receipt of a satisfactorily completed documentation and **certification** fee, if required, the **certification authority** may issue a **certificate**.

#### A.13 VALIDITY OF CERTIFICATE

- A.13.1 A **hull certificate** becomes invalid upon:
  - (a) the change to any items recorded on the **hull certificate** as required under A.11.2.
  - (b) withdrawal by the certification authority,
  - (c) the issue of a new certificate.

#### A.14 HULL RE-CERTIFICATION

- A.14.1 The **certification authority** may issue a **certificate** to a previously certified **hull**:
  - (a) when it is invalidated under A.13.1(a) or (b), after receipt of the old **certificate**, and **certification** fee if required.
  - (b) when it is invalidated under A.13.1 (c), at its discretion.
  - (c) in other cases, by application of the procedure in A.12.

#### A.15 RETENTION OF CERTIFICATION DOCUMENTATION

- A.15.1 The **certification authority** shall:
  - (a) retain the original documentation upon which the current **certificate** is based.
  - (b) upon request, transfer this documentation to the new **certification authority** if the **hull** is exported.
- A.15.2 The NCA shall send the OKDIA details of **certificates** issued with the names and addresses of the owners.

## **Section B – Boat Eligibility**

For a **boat** to be eligible for *racing*, it shall comply with the rules in this section.

#### **B.1 CLASS RULES AND CERTIFICATION**

- B.1.1 The **boat** shall:
  - (a) be in compliance with the class rules.
  - (b) have a valid hull certificate.
  - (c) have valid **certification marks** where applicable.

#### **B.2 EVENT LIMITATION MARKS**

B.2.1 Where an event uses **event limitation marks** these marks shall not be removed during the event. If an **event limitation mark** becomes damaged or lost this shall be reported to the Race Committee or Event Technical Committee as soon as practical.

# PART II – REQUIREMENTS AND LIMITATIONS

The **crew** and the **boat** shall comply with the rules in Part II when *racing*. In case of conflict Section C shall prevail.

The rules in Part II are closed class rules. Certification control and equipment inspection shall be carried out in accordance with the ERS except where varied in this Part.

## Section C – Conditions for Racing

#### C.1 GENERAL

#### C.1.1 RULES

Add to Rule 42.3 (c):

(1) this shall be done with the **mainsheet** turning through at least three blocks between the **boom** and the **crew**, such that the system creates a minimum purchase of three to one. The final block shall be securely fastened in the cockpit area.

#### C.2 CREW

#### C.2.1 LIMITATIONS

- (a) The **crew** shall consist of 1 person.
- (b) No crew is permitted to take part in racing unless he/she is a member of his/her NCA. If there is no NCA, then the crew must be a member of a NCA approved by the OKDIA. Any crew that takes part in racing in contravention of this rule may be disqualified without a hearing.

#### C.3 PERSONAL EQUIPMENT

#### C.3.1 MANDATORY

The **crew** shall wear a **personal flotation device** to the minimum standard ISO 12402-5, or USCG Type III, or AS 4758 Level 50, or equivalent except for short periods when changing or adjusting clothing.

#### C.3.2 TOTAL WEIGHT

The total weight of worn clothing and equipment shall not exceed 10 kg, weighed as per RRS Appendix H.

#### C.4 ADVERTISING

#### C.4.1 LIMITATIONS

Advertising may be displayed only in accordance with World Sailing Regulation 20 - Advertising Code.

#### C.5 PORTABLE EQUIPMENT

#### C.5.1 FOR USE

- (a) MANDATORY
  - (1) Any equipment supplied or required by the Organising Authority if stated by the Notice or Race or Sailing Instructions.

#### (b) OPTIONAL

- (1) Any equipment specifically permitted by the Notice of Race and/or Sailing Instructions
- (2) Any of the following, or a combination, provided that they perform no other function or display any information not relating to the specific function(s) of the device.
  - (i) Any electronic or mechanical timing devices.
  - (ii) Any electronic or mechanical inclinometer.
  - (iii) Any camera.
  - (iv) Any heart rate monitor.
  - (v) Any compass maximum of two
- (3) Any mechanical wind indicators.
- (4) Any hand bailers and/or buckets.
- (5) Any anchor and warps.
- (6) Any writing equipment.
- (7) Any spares such as ropes, fittings, and tools.

#### C.5.2 NOT FOR USE

#### (a) MANDATORY

(1) Any floating towing rope with a minimum length of 10 m of not less than 6 mm in diameter, and which shall be accessible without opening a watertight bulkhead.

#### (b) OPTIONAL

- (1) One paddle.
- (2) Mooring line.
- (3) Flags.
- (4) Bags.
- (5) Fenders.

#### C.6 HULL

#### C.6.1 WEIGHT

	min	max
The <b>hull</b> weight in dry condition including fixed compass(s), pulley blocks attached to the <b>hull</b> and all control lines but excluding the mainsheet.	72 kg	

#### C.6.2 CORRECTOR WEIGHTS

- (a) Corrector weights of not more than 10 kg are allowed.
- (b) If the weight of the **hull** is under the minimum limit, **corrector weights** of not more than 5 Kg and of approximately equal weight and made of any material shall be fastened so as to touch the aft face of the bulkhead at station 2 and situated within an area of 150 mm athwartships, 150 mm vertical and 80 mm aft from the intersection point of the **sheerline** and station 2 bulkhead.
- (c) Additional **corrector weights** of not more than 5 kg and of approximately equal weight and made of any material may be used and shall only be attached to the underside of the deck at bow and transom

#### C.6.3 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without re-certification or approval of the certification authority. Unless stated otherwise items mentioned in this section may be obtained from any manufacturer or supplier.

#### **MODIFICATIONS**

- (a) Holes may be made in the **hull** for the fixing of fittings.
- (b) Any line bags, and additional fairleads, cleats, jammers and pad eyes, may be placed in the **hull**.

#### **MAINTENANCE**

- (c) Maintenance of the hull is permitted.
- (d) Lubrication of the hull is permitted.

#### **REPAIR**

(e) The **hull** may be altered or repaired provided that it continues to comply with the **class rules.** 

#### C.6.4 LIMITATIONS

- (a) Only one **hull** shall be used during an event, except when lost or unintentionally damaged beyond repair. Such replacements shall be made only with the approval of the Event Technical Committee.
- (b) Inspection hole covers and drainage plugs shall be kept in place and closed, except for short periods of time when items are placed or removed.
- (c) The distance from the masthead halyard sheave to the top of the transom at the centreline shall not change by more than 100 mm between the mast being in its most aft position to its most forward position, with the mast facing fore/aft.
- (d) The distance from the masthead halyard sheave to the top of the transom at the centreline shall not change by more than 150 mm between the mast being in its most aft position when facing fore/aft and the mast being in its most forward position when the mast is rotated through 90 degrees to the centreline.

#### C.7 HULL APPENDAGES

#### C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without re-**certification** or approval of the **certification authority**. Unless stated otherwise items mentioned in this section may be obtained from any manufacturer or supplier.

#### **MODIFICATIONS**

(a) The fixings and fastenings of the **hull appendages** may be replaced by any fixing and fastening.

#### **MAINTENANCE**

- (b) **Maintenance** of the **hull appendages** is permitted.
- (c) **Lubrication** of the **hull appendages** is permitted.

#### **REPAIR**

(d) **Rudders** and **centreboards** may be altered or repaired providing that they continue to comply with the current **class rules**.

#### C.7.2 LIMITATIONS

(a) Any number of **hull appendages** may be used during an event. If required by the Notice of Race or Sailing Instructions, not more than one

**centreboard** and one **rudder** may be used during an event, except when a **hull appendage** has been lost or unintentionally damaged beyond repair. Such replacements shall be made only with the approval of the Event Technical Committee.

- (b) When a metal centreboard (aluminium or otherwise) needs to be replaced, it may only be replaced by an aluminium centreboard of maximum thickness of 6 mm and otherwise shall be compliant with section E.2. No other metals are permitted.
- (c) Any tiller may be used.

#### C.7.3 CENTREBOARD

#### (a) DIMENSIONS

	min	max
Extension below <b>keel</b> , excluding keel bands		800 mm

#### (b) LIMITATIONS

(1) When fully raised the **centreboard** shall not project below the keel bands.

#### C.7.4 RUDDER

#### (a) DIMENSIONS

	min	max
The longitudinal distance from the top leading		
edge of the <b>rudder</b> , extended in a straight line as		
necessary, to		45 mm
(i) transom at deck level		45 mm
(ii) transom at hull datum point		
Difference between (i) & (ii)		5 mm
Vertical distance of the intersection of the leading		
edges of the rudder to the hull datum point.		50 mm

#### (b) LIMITATIONS

- (1) Unless changed by the Notice or Race or Sailing Instructions, lifting **rudder** blades shall be pinned or bolted in the down position in a separate place from the point at which the **rudder** blade pivots.
- (2) Any safety device shall be fitted to prevent the **rudder** becoming detached unintentionally.

#### C.8 RIG

#### C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without re-certification or approval of the certification authority. Unless stated otherwise, items mentioned in the section may be obtained from any manufacturer or supplier.

#### **MODIFICATIONS**

- (a) A device shall be fitted to the **boom** to prevent any part of the **sail** extending aft of the forward edge of the **outer limit mark.**
- (b) Fittings and **spars** may be modified to accommodate different diameter bolts or rivets.

#### **MAINTENANCE**

(c) Maintenance of the rig is permitted.

#### REPAIR

(d) Masts and booms may be altered or repaired providing that they continue to comply with the current class rules, except that alterations or repairs of more than one meter in length to masts made from materials other than wood or aluminium alloy, shall only be made by Licensed Mast Builders.

#### C.8.2 LIMITATIONS

- (a) Any number of masts and booms may be used during an event. If required by the Notice of Race or Sailing Instructions, not more than one boom and one mast may be used during an event, except when an item has been lost or unintentionally damaged beyond repair. Such replacements shall be made only with the approval of the Event Technical Committee.
- (b) Any running rigging may be used.
- (c) The intersection of the aft edge of the **mast spar** and the top of the **boom spar**, each extended as necessary, shall not be below the upper edge of the mast **lower limit mark** when the boom spar is at 90 degrees to the mast **spar**.
- (d) The **boom** shall be attached to the **mast** in such a way that the **boom** and the **mast** rotate as one.
- (e) There shall be a security device to prevent the **mast** coming out of the **mast** step unintentionally.
- (f) The **mast** position shall not be manually adjusted while *racing*.

#### C.8.3 MAST

(a) DIMENSIONS

	Min	Max
Lower point height	265 mm	275 mm

#### C.9 SAILS

#### C.9.1 IDENTIFICATION

National letters and sail numbers and sail insignia shall conform to RRS Appendix G.

#### C.9.2 MODIFICATIONS. MAINTENANCE AND REPAIR

The following is permitted without re-certification or approval of the **certification authority**. Unless stated otherwise items mentioned in this section may be obtained from any manufacturer or supplier.

#### **MODIFICATION**

- (a) Addition of tell tales.
- (b) Addition of camber stripes.

#### **MAINTENANCE**

(c) Maintenance of the sail is permitted.

REPAIR

(d) **Sails** may be altered or repaired providing that they continue to comply with the **class rules.** 

#### C.9.3 LIMITATIONS

- (a) Not more than 1 sail shall be carried aboard.
- (b) Any number of sails may be used during an event. If required by the Notice of Race or Sailing Instructions, not more than two sails may be used during an event, except when a sail has been lost or unintentionally damaged beyond repair. Such replacements shall be made only with the approval of the Event Technical Committee.
- (c) Battens may be placed in the batten pockets

#### C.9.4 USE

- (a) The **sail** shall be hoisted on a halyard. The arrangement shall permit hoisting and lowering of the **sail** at sea.
- (b) The highest visible point of the **sail**, projected at 90 degrees to the mast **spar**, shall not be set above the lower edge of the mast **upper limit mark**.
- (c) The intersection of the **leech** and the top of the boom **spar**, each extended as necessary, shall not be behind the fore side of the boom **outer limit mark**.
- (d) **Luff** and **foot** bolt ropes shall be in the **spar** grooves or tracks.

### Section D - Hull

#### D.1 PARTS

#### D.1.1 MANDATORY

- (a) Hull shell.
- (b) Deck.
- (c) Buoyancy Tanks.
- (d) Bulkheads.
- (e) Sheerguards

#### D.1.2 OPTIONAL

- (a) Floorboards.
- (b) Cockpit liner.

#### D.2 GENERAL

#### D.2.1 RULES

- (a) The **hull** shall comply with the **class rules** in force at the time of initial **certification.**
- (b) Alterations or replacements shall comply with current class rules.

#### D.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) **Modifications, maintenance and** repairs shall be carried out so that the **boat** continues to comply with the **class rules**. Only materials listed in D.3.1 may be used for repairs.

#### D.2.3 DEFINITIONS

#### (a) HULL DATUM POINT

The **hull datum point** is the intersection of the transom and the bottom **hull** panels at the lowest point of the transom, extended if necessary and excluding the keel band.

- (b) The Bow Measurement Point is at the intersection of the extension of the stem and the deck, and including any keel-bands.
- (c) At the measurement stations, the centre plane measurement points of the **hull** are at the intersection of the bottom panels, extended if necessary and excluding the keel band.
- d) At the measurement stations, the chine points of the **hull** are at the intersection of the topside and bottom panels, extended if necessary.
- (e) At the measurement stations, a sheerline gauge as shown in diagram H.1.10, shall be used to find the **sheerline**
- (f) A cockpit liner is a moulded cockpit incorporating the bulkheads at stations 1 and 2. It may include a **centreboard** case cover, topside panels, flanges to connect with the **hull** shell and a moulding to hold the main-sheet block. All parts shall be made from GRP and/or GRP sandwich only.

#### D.2.4 IDENTIFICATION

- (a) The World Sailing Building Plaque shall be permanently placed by the builder on the starboard side of the aft cockpit bulkhead.
- (b) The hull shall carry the sail numbers and national letters, in figures not less than 20 mm high, either cut out, burned or engraved into either
   (1) the hog

- (2) the centreboard case in the cockpit
- (3) on the bulkhead at station 2 on the centreline
- (4) a plaque made from unreinforced plastic or any material permitted in Rule D.3.1(a), permanently attached to the bulkhead at station 2 on the centreline.

#### D.2.5 MANUFACTURERS

- (a) The **hull** may be built by any amateur or professional builder.
- (b) From June 1<sup>st</sup> 2023, the first **hull** manufactured from new moulds that are intended for production, shall be fully measured by either an International Measurer or an **official measurer** appointed by OKDIA.

#### D.2.6 CONSTRUCTION

- (a) The panels that make up the major external surfaces of the **hull** shall be constructed such that they are, in principle, fair.
- (b) When measured athwartships at the stations, the **hull** shell panels shall not be concave.
- (c) When measured athwartships, the fore and aft decks shall not be concave.

#### D.3 HULL SHELL

#### D.3.1 MATERIALS

- (a) The **hull** shell, including the **centreboard** case, shall be built from one or a combination of:
  - (1) Wood (solid or laminated)
  - (2) GRP sandwich or wood sandwich
  - (3) GRP
- (b) The **hull** may be covered with resin, gelcoat, paint, varnish or vinyl.

#### D.3.2 CONSTRUCTION

- (a) **Hull** shell and centreboard case thickness is optional, except that for foam sandwich construction it shall not exceed 25 mm including stringers.
- (b) Thickness of the hull shell, including any cockpit liner, with the exception of stringers, framing, deck and transom, shall be within 10 % along the length of the boat. No attempt shall be made to concentrate weight at any point. If it is suspected that this rule is being broken, an equipment inspector or an official measurer may authorise test holes to be drilled in the skin or structure. (For the purpose of this rule the thickness shall not include either paint, non-skid paint in the cockpit, fairing filler or repairs, reinforcements for the mast step, drain tube, bracket for mainsheet block or pads to secure flotation, or joins in the core).
- (c) Single skin wood boats may have an extra layer of plywood, with a maximum thickness of 4 mm, added on the cockpit floor from a maximum of 50 mm aft of station 1 to a maximum of 50 mm forward of station 2.

#### D.4 DECK

#### D.4.1 MATERIALS

- (a) The deck shall be built from one or a combination of:
  - (1) Wood (solid or laminated).

- (2) GRP sandwich or wood sandwich.
- (3) GRP.
- (b) The deck may be covered with resin, gelcoat, paint, varnish or vinyl.

#### D.4.2 CONSTRUCTION

- (a) Deck thickness shall not exceed 25 mm.
- (b) The **sheerline** between stations 1 & 2 shall not be convex.
- (c) A breakwater may be fitted between the mast and the mainsheet horse or track.
- (d) Struts and knees to support the side deck are permitted, except that struts and knees that extend more than 80 mm below the sheerline
  - i) shall have a maximum combined longitudinal thickness per side of 20 mm; and
  - ii) shall not extend more than 240 mm inside the sheerline.
- (e) Cockpit liners are allowed. The cockpit including bulkheads and any centreboard case cover and mouldings for attaching fittings may be made in one piece and attached into the hull shell providing that the finished hull complies with the measurements and rules in D.3, D.5 and D.7.2. Notwithstanding D.3.2.b, the joined topside panels may have an extra 2 mm of thickness to allow for glue. Centreboard case covers are permitted and shall not be wider than 90 mm at any point. Any connecting flange from the liner to the floor shall not be wider than 70 mm. For the purpose of this rule the flange may extend around any fittings on the floor such as bailers and mainsheet fixing brackets, providing they are all part of the same moulding. Any void between the centreboard case cover and case sides must be able to be inspected.

#### D.5 BUOYANCY TANKS AND BULKHEADS

#### D.5.1 MATERIALS

- (a) The buoyancy tanks and bulkheads shall be built from one or a combination of:
  - (1) Wood (solid or laminated)
  - (2) GRP sandwich or wood sandwich
  - (3) GRP
- (b) The bulkheads may be covered with resin, gelcoat, paint, varnish or vinyl.
- (c) The drain tube and any tubes for underdeck control lines shall be made from unreinforced plastic or any material permitted in Rule D.3.1.(a).

#### D.5.2 CONSTRUCTION

- (a) Bulkhead thickness shall not exceed 12 mm for wood or GRP sandwich with a wood or cormat core, or 20 mm for GRP sandwich with a foam or end grain balsa core.
- (b) Two buoyancy tanks shall be formed by three watertight bulkheads. All the space aft of the cockpit shall form a buoyancy tank. All the space between the bulkhead at station 2 and the bulkhead forward of station 3 shall form a buoyancy tank.

- (c) Each tank shall have at least one and not more than three inspection holes if their covers are unthreaded and an unlimited number if the covers are threaded.
- (d) Each inspection hole shall have a watertight detachable cover capable of resisting accidental dislodgement.
- (e) Each tank may have a maximum of two drain holes into the cockpit.
- (f) Control lines passing through buoyancy tanks shall be inside watertight tubes.
- (g) The **mast** compartment (the area forward of the front bulkhead) shall drain into the cockpit through single (one) tube.
- (h) A minimum of 0.12 m³ of closed cell expanded plastic foam material shall be securely fixed in the buoyancy tank forward of the cockpit.
- (i) Any buoyancy material may be added under the side decks to a point not lower than 80 mm below the **sheerline.** This buoyancy shall not be included in the requirements of D.5.2
- (j) The corners between the deck and bulkheads at stations 1 and 2 may be bevelled or shaped. Measured from the **hull datum point**, no part of the bevel or shape forward of 1809 mm or aft of 785 mm shall be below the **sheer**.

#### D.6 SHEERGUARDS

#### D.6.1 MATERIALS

The sheerguards shall be built from one or a combination of:

- (a) Wood (solid or laminated).
- (b) GRP.

#### D.6.2 CONSTRUCTION

(a) Sheerguards shall run the full length of the boat.

#### D.6.3 LIMITATIONS

(a) Sheerguards shall not be positioned above the adjacent **sheerline**.

#### D.7 ASSEMBLED HULL

#### D.7.1 FITTINGS

- (a) MANDATORY
  - (1) Any towing eye on the foredeck near the stem head.
  - (2) Any mast step.
  - (3) Keel bands shall be fixed to the keel line of the **hull**. They shall run both sides of the centreboard case slot and may be faired together at either end. They may be part of the **hull** mould if built from GRP. They shall be built from one or a combination of:
    - i. Wood (solid or laminated).
    - ii. GRP.
    - iii. Metal.
    - iv. Plastic.

#### (b) OPTIONAL

- (1) Any **fittings**.
- (2) Any **mast** bearings for **mast** step and deck that may be adjustable.

- (3) Any floorboards.
- (4) Any self-bailers.
- (5) Any sheeting and centreboard hoists.
- (6) Any mainsheet track with one traveller or horse.
- (7) Any bracket or block to fasten a mainsheet block on floor or case.
- (8) Any foam floor mats for non-skid with a maximum thickness of 6mm.
- (9) Any hiking pads, fitted to the side-decks and sheerguards, provided they fall within the side deck measurements in D.7.2. However, padding up to 10 mm thick is allowed to cover the **sheerline** measured 90 degrees to the surface and shall not be more than 10 mm above the **sheerline** on the sheerguard.

#### (c) LIMITATIONS

- (1) Toe straps shall not extend outboard.
- (2) The mainsheet track may extend outboard to the topside panel. If the side deck profile is cut away for this purpose, the panel on which the track sits shall satisfy the side-deck dimension rules.
- (3) **Fittings** made from exotic materials and/or CRP shall only be attached and shall not be integral to the **hull**, deck or cockpit including the internal structure. Any wear patches, protective pads and backing pads made from exotic materials and/or CRP shall not be recessed into these areas. For the purpose of this rule, exotic is defined in H.3.
- (4) The use of exotic materials (excluding EVA foam) and/or CRP is limited to wear patches, protective and backing plates, compass brackets, cleats, fairleads, pad eyes, blocks, traveller supports, gudgeons, pintles, hiking pads, **mast** bearings and chocks, **mast** bearing adjusting mechanisms and block organiser wings when they do not incorporate a **mast** bearing.
- (5) Hiking pads made from CRP, GRP, timber and exotics shall not exceed 550 mm in length and are limited to one per side.
- (6) The size and weight of all **fittings**, backing plates and their fastenings shall be fit for purpose and shall not be used to alter the weight distribution of the **hull**.

#### D.7.2 DIMENSIONS

The keel line shall be taken as the intersection line from the transom to the stem of the **hull** shell and the **hull** centre plane.

Longitudinal distances shall be measured parallel to the base line.

The sections shall be taken as vertical, transverse planes at the following positions:

	From hull datum point
Station 0	0 mm
Station 1	800 mm
Station 2	1800 mm
Station 3	2800 mm

The baseline shall be on the centre plane of the **hull** at the following vertical distances below the bottom of the **hull** as defined in D.2.3 (b):

At the hull datum point	200 mm from the <b>hull</b> shell
At station 3	28 mm from the <b>hull</b> shell

	Min	Max
Longitudinal distance from <b>hull datum point</b> to Bow Measurement Point.	3990 mm	4010 mm
Vertical distance from baseline to bottom of <b>hull</b> shell		
At station 1	85 mm	105 mm
At station 2	0 mm	16 mm
At 3500 mm forward of hull datum point	90mm	110 mm
Longitudinal distance from <b>hull datum point</b> to top of transom	0 mm	12 mm
Vertical distance from baseline to chine at Station 0	237 mm	257 mm
Vertical distance from baseline to <b>sheerline</b> at Station 0	433 mm	453 mm
Vertical distance from baseline to chine at Station 1	178 mm	198 mm
Vertical distance from baseline to <b>sheerline</b> at Station 1	449 mm	469 mm
Vertical distance from baseline to chine at Station 2	164 mm	184 mm
Vertical distance from baseline to <b>sheerline</b> at Station 2	482 mm	502 mm
Vertical distance from baseline to chine at Station 3	216 mm	236 mm
Vertical distance from baseline to <b>sheerline</b> at Station 3	537 mm	557 mm
Vertical distance from baseline to Bow Measurement Point	588 mm	608 mm
Vertical distance from baseline to deck at centreline of Station 0	462 mm	482 mm

Longitudinal distance along baseline from hull datum point to a point where extension of straight edge of foreside of stem (included keel band if any) meets base line	3705 mm	3735 mm
Longitudinal distance from Bow Measurement Point to the stem (including keel band if any) 300 mm below baseline 180 mm below baseline	140 mm 265 mm	150 mm 285 mm
Longitudinal distance from hull datum point to centre of centreboard bolt	2390 mm	2410 mm

Radius of chines aft of station 3  Length of keelband from hull datum point along keelband Radius of stem forward of 3500 mm  Width of keelband  Depth of keelband  Beam of hull, excluding sheerguards and fittings:  *At sheerline  At station 0 At station 1 At station 2 At station 3  *At chine  At station 0 At station 1 At station 2 At station 3  *At chine  At station 3  *At chine  At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 0 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck above sheerline at centre of mast	15 mm
along keelband Radius of stem forward of 3500 mm  Width of keelband Depth of keelband  Beam of hull, excluding sheerguards and fittings: *At sheerline  At station 0 At station 1 At station 2 At station 3  *At chine  At station 0 At station 1 At station 2 At station 3  *At chine  At station 0 At station 1 At station 2 At station 3  *Transverse width of side decks  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull Depth of side deck below line joining sheerline and pioning sheerline on opposite sides of the hull Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 0 At station 1 At station 2 At station 3 on topside panel at any point (Diagram H.1.8) N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard. Height of continuation of centreline of deck	
Width of keelband 3 mm  Depth of keelband 3 mm  Beam of hull, excluding sheerguards and fittings:  *At sheerline  At station 0 At station 1 At station 2 At station 3  *At chine  At station 0 At station 1 At station 1 At station 2 At station 3  *Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 1 At station 0 At station 1 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	m
Depth of keelband  Beam of hull, excluding sheerguards and fittings:  *At sheerline  At station 0 At station 1 At station 2 At station 3  *At chine  At station 1 At station 1 At station 2 At station 1 At station 2 At station 3  *Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 1 At station 0 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	11 mm
Beam of hull, excluding sheerguards and fittings:  *At sheerline  At station 0 At station 1 At station 2 At station 3  *At chine  At station 0 At station 1 At station 1 At station 1 At station 1 At station 2 At station 2 At station 3  *Transverse width of side decks  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 1 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	22 mm
fittings: *At sheerline  At station 0 At station 1 At station 2 At station 3  *At chine  At station 0 At station 1 At station 3  *At chine  At station 0 At station 1 At station 1 At station 2 At station 2 At station 3  *Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	10 mm
At station 0 At station 1 At station 2 At station 3  *At chine  At station 0 At station 3  *At chine  At station 0 At station 1 At station 1 At station 2 At station 3  *Transverse width of side decks  Transverse width of side decks  Teach of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3 on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	
At station 1 At station 2 At station 3  *At chine  At station 0 At station 1 At station 1 At station 0 At station 1 At station 2 At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3 on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	
At station 2 At station 3  *At chine  At station 0 At station 1 At station 2 At station 1 At station 2 At station 3  *At station 1 At station 2 At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	n 918 mm
*At chine  At station 3  At station 0 At station 1 At station 2 At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	m 1248 mm
*At chine  At station 0 At station 1 At station 2 At station 3  At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	m 1428 mm
*At chine  At station 0 At station 1 At station 2 At station 3  At station 3  At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	m 1170 mm
At station 1 At station 2 At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck  20 mm	
At station 1 At station 2 At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 1 At station 2 At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck  20 mm	n 848 mm
At station 2 At station 3  Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3 on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	
Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 1  At station 2  At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	
Transverse width of side decks  Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0  At station 1  At station 2  At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	_
Height of side deck above line joining sheerline on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0  At station 1  At station 2  At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	030 11111
on opposite sides of the hull  Depth of side deck below line joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3 on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	n 240 mm
joining sheerline on opposite sides of the hull  Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0  At station 1  At station 2  At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the sheerline and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	40 mm
Distance from a straight edge placed at right angles to the baseline on bottom panel at:  At station 0 At station 1 At station 2 At station 3 on topside panel at any point (Diagram H.1.8) N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	
angles to the baseline on bottom panel at:  At station 0  At station 1  At station 2  At station 3  on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	80 mm
At station 1 At station 2 At station 3 on topside panel at any point (Diagram H.1.8) N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	
At station 2 At station 3 on topside panel at any point (Diagram H.1.8) N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	15 mm
At station 3 on topside panel at any point (Diagram H.1.8) N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	25 mm
on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	30 mm
on topside panel at any point (Diagram H.1.8)  N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	35 mm
N.B: This measurement (above) shall be taken between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	8 mm
between the <b>sheerline</b> and the chine and not from the underside of the sheerguard.  Height of continuation of centreline of deck	3 111111
from the underside of the sheerguard.  Height of continuation of centreline of deck	
1 711 mm	
above <b>sheerline</b> at centre of mast	1 40 mm
	40 111111
Sheerguards;	
depth (vertically from <b>sheerline</b> ) 9 mm	35 mm
width (horizontally from <b>sheerline</b> ) 3 mm	35 mm
Longitudinal distance from forward face of aft cockpit bulkhead to <b>hull datum point</b> 785 mr	n 815 mm
Longitudinal distance from aft face of forward cockpit bulkhead to <b>hull datum point</b> 1779 m	m 1809 mm

Longitudinal distance from bulkhead at or forward of Station 3 (and aft of mast) to hull datum point	2800 mm	
Radius between bulkheads and <b>hull</b> side or bottom panels		50 mm
Drain holes into cockpit from forward tanks		2
Drain holes into cockpit from aft tanks		2
Diameter of drain holes as above (internal)	10 mm	20 mm
Diameter of <b>mast c</b> ompartment drain tube (internal)	10 mm	20 mm
Diameter of inspection holes in tanks (internal)	85 mm	
Extension into buoyancy tank of covers to holes as above		200 mm
Total cross sectional area of control line tubes passing through buoyancy tanks		150 cm <sup>2</sup>
Control line tubes from centreline of <b>boat</b>		350 mm

## Section E – Hull Appendages

#### E.1 GENERAL

#### E.1.1 RULES

- (a) **Hull appendages** shall comply with the **class rules** in force at the time of **certification**.
- (b) Alterations and replacements shall comply with current class rules.

#### E.1.2 CERTIFICATION

(a) The official measurer shall certify the hull appendages.

#### E.1.3 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) **Hull appendages** shall not be altered in any way except as permitted by these **class rules**.

#### E.1.4 MANUFACTURERS

(a) The hull appendages may be built by any amateur or professional builder.

#### E.2 CENTREBOARD

#### E.2.1 MATERIALS

- (a) The centreboard shall be built from one or a combination of:
  - (1) Wood (solid or laminated).
  - (2) GRP sandwich or wood sandwich.
- (b) **Centreboards** may be covered with gelcoat, resin, paint or varnish.

(c) Protective strips of any materials are optional and may be integral to the **centreboard**.

#### E.2.2 CONSTRUCTION

- (a) The profile of the measured part of the **centreboard** (excluding any pivot slot) shall be within two lines; one 5 mm outside and the other 5 mm inside the profile shown on the measurement diagram, when the pivot point in the **centreboard** lies on the pivot point shown on the measurement diagram.
- (b) A slot may be made between the pivot point in the **centreboard** and the perimeter.
- (c) A device shall be fitted to prevent accidental dislodgement off the pivot.

#### E.2.3 FITTINGS

- (a) OPTIONAL
  - (1) **Fittings** to control the position of the **centreboard** are optional.

#### E.2.4 DIMENSIONS

	min	max
Thickness		20 mm
Thickness of <b>centreboard</b> above waterline as shown on diagram (inside 20 mm from edges)	10 mm	
Width of pivot slot		12 mm
Free movement of <b>centreboard</b> on pivot bolt		2 mm
Width of protective strip from profile edge as defined in the measurement diagram		20 mm

#### E.3 RUDDER, RUDDER BLADE, RUDDER STOCK AND TILLER

#### E.3.1 MATERIALS

- (a) The **rudder** shall be built from one or a combination of the following materials.
  - (1) Wood (solid or laminated).
  - (2) GRP sandwich or wood sandwich.
- (b) **Rudders** may be covered with gelcoat, resin, paint or varnish.
- (c) The **rudder** stock material, where used, is optional.
- (d) The tiller material is optional
- (e) The tiller extension material is optional.
- (f) Protective strips of any material are optional and may be integral to the **rudder** or **rudder** blade.

#### E.3.2 CONSTRUCTION

- (a) The **rudder** shall consist of either a **rudder** blade or a **rudder** stock incorporating a **rudder** blade.
- (b) The arrangement of **rudder** blade, **rudder** stock, tiller and tiller extension is optional except that:
  - (1) a tiller shall not be made integral to a **rudder** blade using exotic materials or CRP.

- (2) a **rudder** stock made from exotic materials or CRP shall only be **fastened** to a **rudder** blade.
- (c) The profile of the measured part of the **rudder** shall be within two lines; one 5 mm outside and the other 5 mm inside the profiles (either Profile 1 or Profile 2) as shown on the measurement diagram.
- (d) Lifting **rudders** shall be able to be fixed in the down position with a pin or bolt separate from the pivot bolt.

#### E.3.3 FITTINGS

- (a) OPTIONAL
  - (1) Any **fittings** are optional.
- (b) LIMITATIONS
  - (1) **Fittings** made from exotic materials or CRP shall only be **fastened** or **bonded** to the **rudder** blade.

#### E.3.4 DIMENSIONS

	min	max
Thickness below the waterline as shown on the measurement diagram.		20 mm
Width of protective strip from profile edge as defined in the measurement diagram		20 mm

## Section F - Rig

#### F.1 GENERAL

#### F.1.1 RULES

- (a) The **spars** and their fittings shall comply with the **class rules** in force at the time of **certification** of the **spar**.
- (b) Alterations and replacements shall comply with current class rules.
- (c) The running **rigging** shall comply with these **class rules**.

#### F.1.2 CERTIFICATION

- (a) The official measurer shall certify the mast and boom.
- (b) No **certification** of running **rigging** is required.

#### F.1.3 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) **Spars** shall not be altered in any way except as permitted by these **class** rules.

#### F.1.4 DEFINITIONS

(a) MAST DATUM POINT

The **mast datum point** is at deck level on the aft centreline face of the **mast.** 

(b) A **spar** section is defined as the extrusion, moulding or tube that forms the basis of the **spar**.

#### F.1.5 MANUFACTURER

- (a) The mast and boom may be built by any amateur or professional builder, except that a licence is required for mast sections built using any materials other than wood or aluminium alloy, and subsequent alterations of more than one metre in length.
- (b) **Mast** licenses shall be issued by the OKDIA. The terms of the OKDIA Mast Building Licence may be subject to review from time to time by World Sailing and the OKDIA.

#### F.2 MAST

#### F.2.1 IDENTIFICATION

(a) If the **mast** section is built using any materials other than wood or aluminium alloy the licenced builder shall permanently fix an official OKDIA mast label on the front of the **mast**, just above the gooseneck.

#### F.2.2 MATERIALS

- (a) The **mast** spar section shall be built from one or a combination of the following materials:
  - (1) Wood (solid or laminated).
  - (2) Aluminium alloy.
  - (3) GRP.
  - (4) CRP.
  - (5) ARP.
- (b) **Masts** may be anodised, painted or varnished.
- (c) The material for an external sail track is optional.
- (d) The material for the **mast** base and deck ring is optional.

#### F.2.3 CONSTRUCTION

- (a) The **mast spar** shall include a fixed sail groove or track which may or may not be integral with the **mast** section.
- (b) The aft side of the sail track or groove shall be constructed straight and the line of the track or groove, extended if necessary, shall be not more than 10 mm outside the aft edge of the mast bearing ring at the deck.
- (c) The cross section shape of a mast shall be a single geometrical figure and shall have no hollows on the outside with the exception of the sail track or groove.
- (d) **Mast** sections may be made as a two-piece or a three-piece section.
- (e) The only permitted additional items to the **mast** construction are:
  - (1) External sail track

(2) Internal connecting sleeves (when **spar** is a two or a three-piece section).

#### F.2.4 FITTINGS

- (a) MANDATORY
  - (1) With the exception of wood **spars**, a fixed fork fitting to connect the **boom**.
- (b) OPTIONAL
  - (1) Other fittings are optional.

#### F.2.5 DIMENSIONS

BINETION		
	min	max
Mast spar cross section;		
diameter at deck level incl. optional mast ring	94 mm	98 mm
diameter at 20 mm above heel point	70 mm	76 mm
Mast spar transverse cross section at;		
from <b>heel point</b> to 1000 mm above	62 mm	
mast datum point		
from 1000 mm above <b>mast datum point</b> to <b>upper point</b> minimum dimension is given by a uniform reduction of	Minus 1 mm for every 100 mm	
Mast spar fore-and-aft cross section at;		
*From <b>heel point</b> to <b>upper point</b> maximum dimensions is given by the actual transverse width <u>Plus 22 mm</u> at the same height.		
* Mast spar curvature at any point		50 mm
* Lower mast limit mark width	10 mm	
* Upper mast limit mark width	10 mm and all above the upper point	
* Lower point to upper point		5400 mm
Boom forks on mast:		
Internal width	32 mm	40 mm
Diameter of <b>boom</b> pin hole	14 mm	18 mm
Centre of pin hole from aft face of mast		39 mm
Centre of pin hole below lower point	33 mm	37 mm
Distance from <b>lower point</b> to centre of gravity with the halyard fully hoisted, including any shackle, and the remaining halyard tail tied to the mast at the <b>lower point</b> .	1430 mm	

#### F.2.6 WEIGHT

	min	max
Mast weight including mast base, deck ring,		
halyard, cleat, permanently attached fittings,	8 kg	
any corrector weights, and excluding	o kg	
gooseneck pin		

#### F.2.7 CORRECTOR WEIGHTS

**Corrector weights** of not more than 1.5 kg are permitted and shall be permanently attached to the external surface of the **mast**.

#### F.3 BOOM

#### F.3.1 MATERIALS

- (a) The **boom** spar section shall be built from one or a combination of the following materials:
  - (1) Wood (solid or laminated).
  - (2) GRP.
  - (3) Aluminium alloy.
- (b) **Boom** sections may be anodised, painted or varnished
- (c) Any material may be used for an external sail track.

#### F.3.2 CONSTRUCTION

- (a) The **boom** spar shall include a fixed sail groove or track which may or may not be integral with the **boom** section.
- (b) The construction method of the **boom** is optional.

#### F.3.3 FITTINGS

- (a) OPTIONAL
  - (1) Any **fittings** are optional.

#### F.3.4 DIMENSIONS

	min	max
Boom spar cross section forward of the outer point:		
Vertical from 200 mm aft of the gooseneck hole transverse	50 mm	90 mm 37 mm
Outer limit mark width	10 mm	
Distance from <b>outer point</b> to centre of the gooseneck hole in <b>boom</b>		2640 mm

#### F.4 RUNNING RIGGING

#### F.4.1 MATERIALS AND CONSTRUCTION

(a) Materials and construction are optional.

#### F.4.2 FITTINGS

(a) Fittings are optional.

#### Section G - Sails

#### G.1 GENERAL

#### G1.1 RULES

- (a) Sails shall comply with the class rules in force at the time of certification.
- (b) Alterations and replacements shall comply with the current class rules.

#### G.1.2 CERTIFICATION

- (a) Sails shall carry the official OKDIA sail label, purchased by the sailmaker from OKDIA. It shall be permanently attached near the tack by stitching across it.
- (b) The **official measurer** shall **certify** sails by stamping, or signing and dating, across the official OKDIA Sail label.
- (c) World Sailing or an MNA may appoint one or more persons at a sailmaker to measure and **certify** sails produced by that manufacturer in accordance with the World Sailing In-House Certification Guidelines.

#### G.1.3 SAILMAKER

(a) No licence is required.

#### G.2 SAIL

#### G.2.1 IDENTIFICATION

(a) The class insignia shall have a height of 200 mm +/- 20 mm and a width of 335 mm +/- 20 mm.

#### G.2.2 MATERIALS

- (a) The **ply** fibres shall consist of polyester.
- (b) **Stiffening** shall consist of:
  - (1) Corner-boards: plastic or aluminium.
  - (2) Battens: Material optional.
- (c) Sail reinforcement shall consist of:
  - (1) **Primary reinforcement:** Any permitted material.
  - (2) **Secondary reinforcement:** as per ERS definition.

#### **LIMITATIONS**

(d) Sail makers are only permitted to build sails from laminated sail cloth upon request and approval by the OKDIA Technical Committee and on a sail by sail basis. For laminate sails only, rules G.2.3 (a), (b) & (c) and all dimensions from G.2.4 except leech length, half & three quarter widths and top width shall not apply, if the approval document from the OKDIA is presented when measuring. The use of those sails is allowed in any OK regatta with the exception of International events.

#### G.2.3 CONSTRUCTION

- (a) The construction shall be: soft sail, single ply sail.
- (b) The **body of the sail** shall consist of the same **woven ply** throughout.

- (c) A foot shelf of not more than 300 mm width is permitted to be of a different material. For the purpose of this rule a foot shelf is defined as a panel or panels of material, attached to the **body of the sail** and which is continuous between the clew eye and the tack eye and which shall taper to a point at the tack eye and clew eye.
- (d) The **sail** shall have 4 batten **pockets** in the **leech**.
- (e) The sail shall have one luff bolt rope and one foot bolt rope.
- (f) The **leech** above the upper **batten pocket** shall not extend beyond a straight line, drawn from the **aft head point** to the upper edge of the upper **batten pocket**.
- (g) The following are permitted: Stitching, glues, webbing, woven and PTFE tapes, bolt ropes, corner eyes, headboard with fixings, Cunningham: one eye or not more than two pulleys, batten pocket patches, batten pocket elastic, batten retaining devices, boom slides, leech line, windows, tell tales, sail shape indicator stripes, headboard slides not extending more than 175 mm from the head point and items as permitted or prescribed by other applicable rules. All permitted items shall be used for their intended purpose.

#### G.2.4 DIMENSIONS

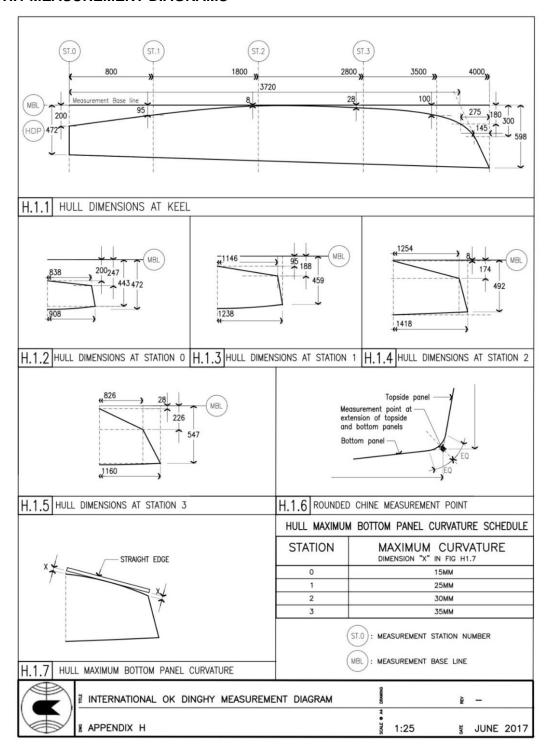
	min	max
Leech length		5425 mm
Half width		1675 mm
Three-quarter width		1040 mm
Top width		160 mm
Primary reinforcement		350 mm
Secondary reinforcement:		
from sail corner measurement points		1050 mm
for flutter patches		120 mm
for batten pocket patches		175 mm
Tabling width on luff and foot		60 mm
Tabling width elsewhere		35 mm
Total window area		$0.3 \; \text{m}^2$
Window to sail edge	150 mm	
Extension of headboard from head point		175 mm
Batten pocket length:		
uppermost and lowermost pockets	(inside)	605 mm
intermediate pockets	(inside)	755 mm
Batten pocket width	(inside)	60 mm
Head point to intersection of leech and centreline of uppermost batten pocket	1000 mm	1200 mm
Clew point to intersection of leech and centreline of lowermost batten pocket	1000 mm	1200 mm
Head point to nearest point of luff bolt rope		50 mm
Tack point to nearest point of luff bolt rope		300 mm
Tack point to nearest point of foot bolt rope		450 mm
Clew point to nearest point of foot bolt rope		100 mm

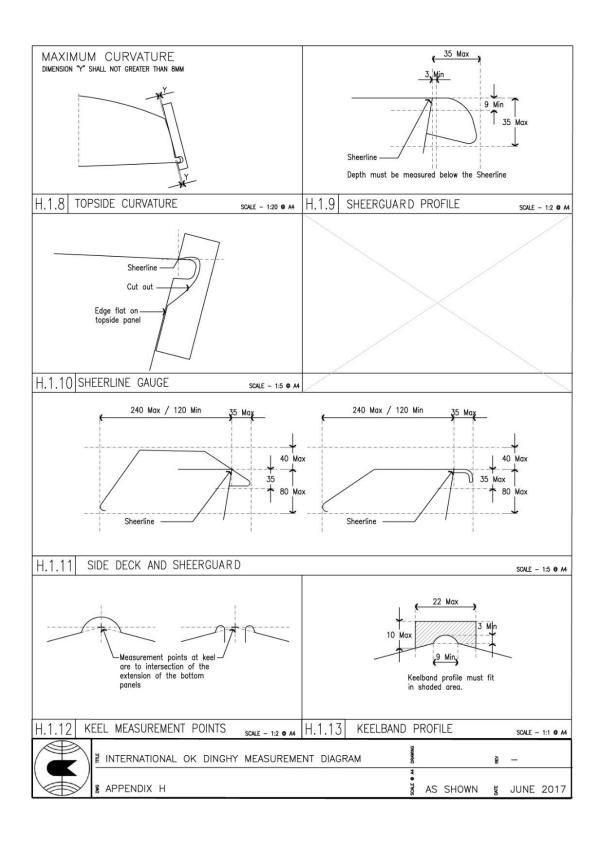
## PART III - APPENDICES

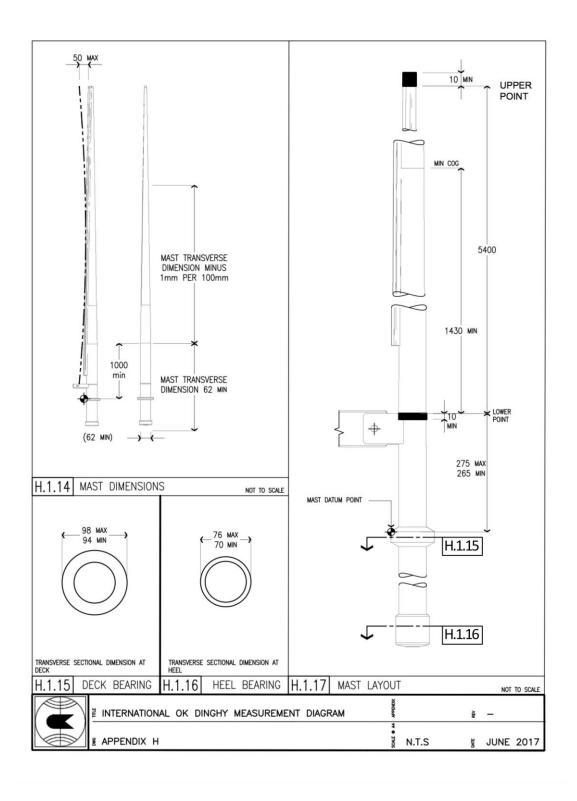
The rules in Part III are **closed class rules**. Measurement shall be carried out in accordance with the ERS except where varied in this Part.

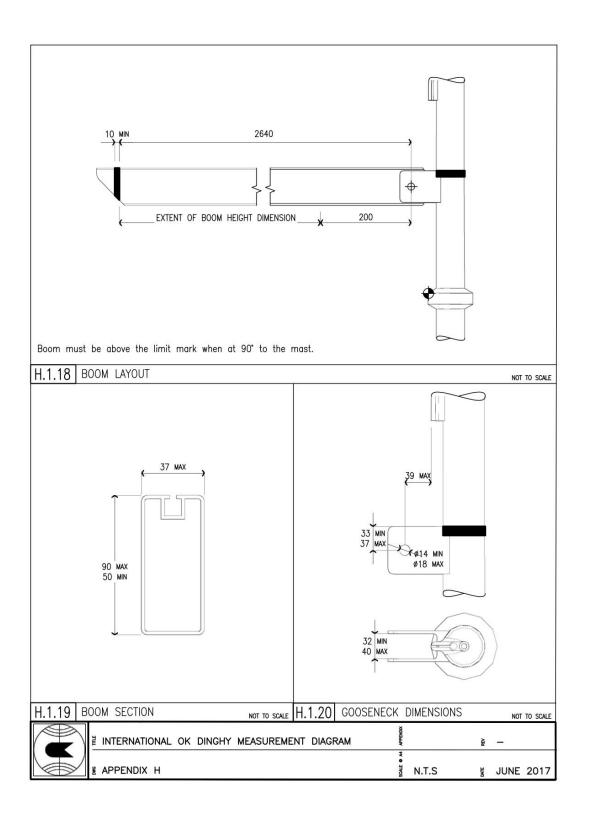
## **Section H**

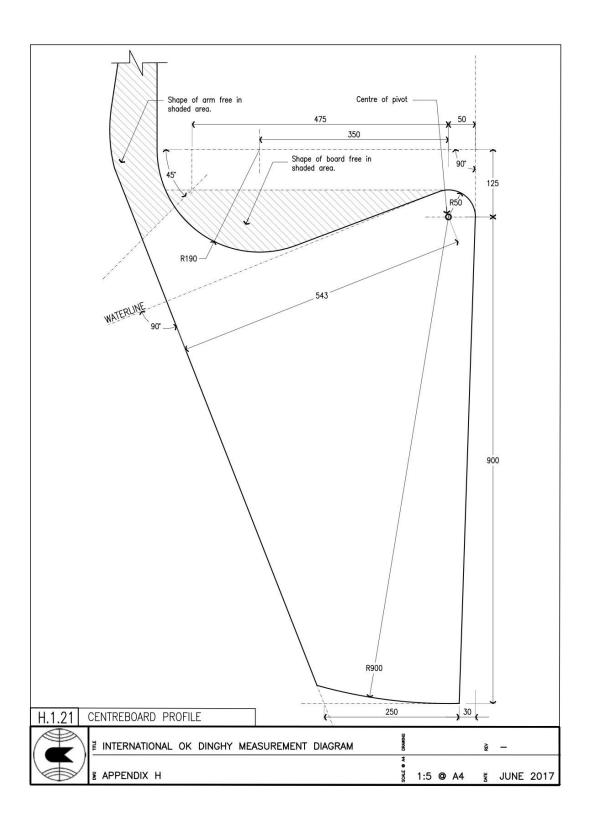
#### **H.1 MEASUREMENT DIAGRAMS**

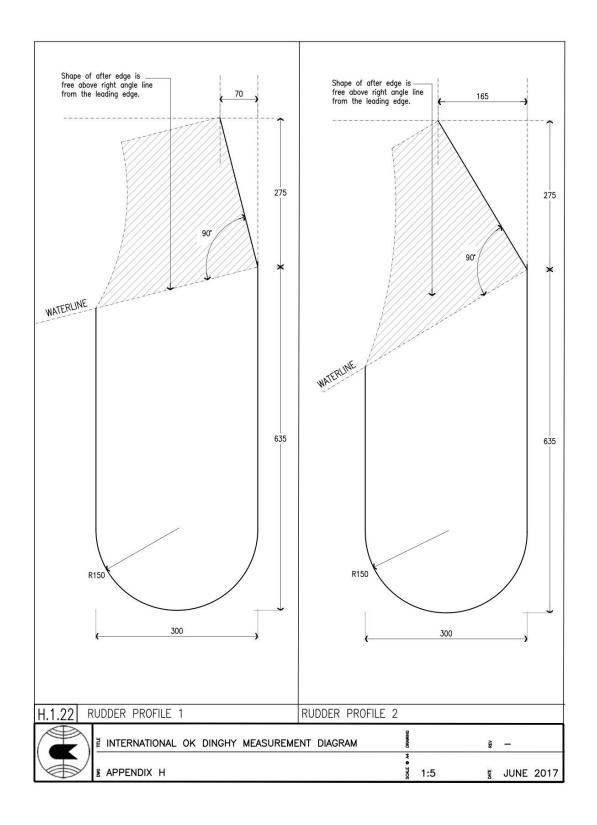


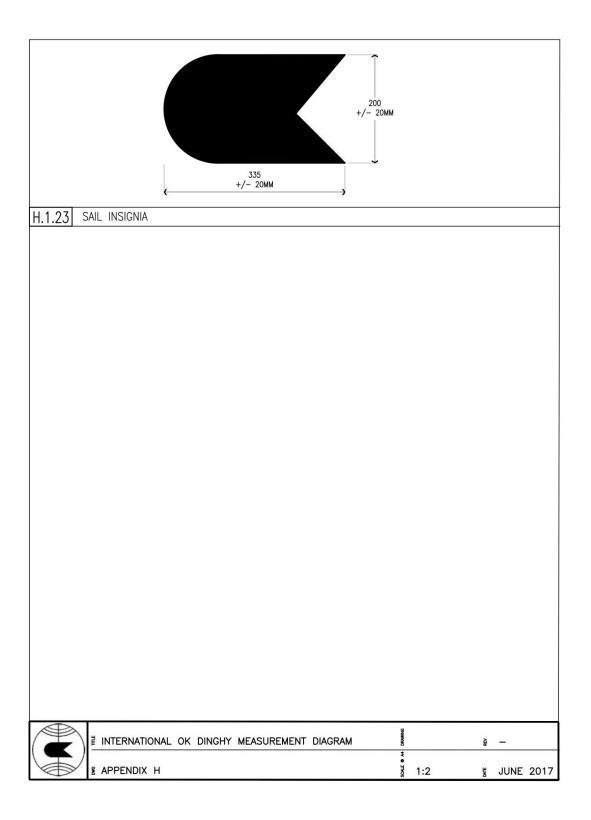












#### H.2 OFFICIAL PLANS

1 General arrangement and construction details 1986

2 Full size details 1986

#### **H.3 DEFINITIONS**

Where shown in the **class rules** – the following abbreviations or descriptions mean:

Fastened – joined using rivets, screws or bolts.

Attached – joined using sealant or glue. May also be fastened.

Integral –joined using ARP, GRP or CRP. May also be attached and/or fastened.

GRP (Glass Reinforced Plastic) – A composite material made from glass fibres bonded with polyester, epoxy or vinylester resin.

CRP (Carbon Reinforced Plastic) – A composite material made from carbon fibre bonded with polyester, epoxy or vinylester resin.

ARP (Aramid Reinforced Plastic) - A composite material made from aramid fibre bonded with polyester, epoxy or vinylester resin.

GRP Sandwich – A composite sandwich material made from glass fibres bonded with polyester, epoxy or vinylester resin and having a core material of foam, wood and/or cormat.

Wood Sandwich – A composite sandwich material made from wood and having a foam core, bonded with polyester, epoxy and/or vinylester resin.

Exotic materials – non metallic materials which may include thermoplastics, thermosets, ceramics and composite products reinforced with materials not defined above.

Effective: 19th June 2023

Previous Issue: 1st February 2022

© World Sailing 2023