HADRON H2

CLASS RULES

2025

The Hadron H2 was designed in 2015 by Keith Callaghan and is manufactured under licence by Hadron Dinghies Ltd.

INDEX

INTRODUCTION

The Hadron H2 is designed as a single-handed racing dinghy to give close competition.

This introduction only provides an informal background and HADRON H2 Class Rules proper begin on the next page.

HADRON H2 hull, centreboard and rudder are manufacturer controlled.

HADRON H2 rigs and sails are measurement controlled.

HADRON H2 hulls shall only be manufactured by Hadron Dinghies Ltd – in the class rules referred to as licensed manufacturers.

HADRON H2 hulls, hull appendages, rigs and sails may, after having left the manufacturer, only be altered to the extent permitted in Section C of the class rules.

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

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

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 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

WS	World Sailing
MNA	WS Member National Authority
NCA	National Hadron H2 Class Association
ERS	Equipment Rules of Sailing
RRS	Racing Rules of Sailing
LM	Licensed Manufacturer (Hadron Dinghies Ltd)

A.3 AUTHORITIES

A.3.1 The **Class Rules Authority** and the **Certification Authority** of the class is the designer (Keith Callaghan) until such time as a viable national Class Association is in existence. The designer is the copyright holder of the Hadron H2 dinghy design. The designer has authorised one LM: Hadron Dinghies Ltd.

A.3.2 The **Certification Authority, Class Rules Authority** and any **Official Measurer** is under no legal responsibility in respect of these rules or accuracy of measurement and no claims arising therefrom can be entertained.

A.3.3 Notwithstanding anything contained herein, the **certification authority** has the authority to withdraw a **certificate**

A.4 ADMINISTRATION OF THE CLASS

A.4.1 Administrative functions as stated in these **class rules** shall be carried out by the designer until such time as a viable national Class Association is in existence.

A.5 WS 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.6 CLASS RULES AMENDMENTS

A.6.1 Amendments to these **class rules** are subject to the approval of the **class rules authority** and the copyright holder.

A.7 CLASS RULES INTERPRETATION

A.7.1 Interpretation of **class rules** shall be made by the **class rules authority**

A.8 SAIL NUMBERS

A.8.1 Sail numbers shall be issued by the designer upon notification by the LM that a **hull** has been completed.

A.8.2 Sail numbers shall be issued in consecutive order starting at “101”.

A.9 HULL CERTIFICATION

A.9.1 Hull **certificates** will not be issued**.**

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 valid **certification marks** if required

B.2 CLASS ASSOCIATION MEMBERSHIP

B.2.1 The **crew** shall be a valid member of the Hadron H2 Class Owners Association.

B.2.2 Where the **crew** is not a valid member of the Hadron H2 Class Association (HH2CA) the **crew** may, by payment of a supplement (the amount to be voted on at each HH2CA AGM), be considered as a member of the HH2CA for that open meeting only. It will be the responsibility of the organising club/body to collect and forward any such supplements paid to the HH2CA.

B.2.3 In order to compete at the National Championships the **crew** must be a full or associate member of the HH2CA.

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

(a) The ERS Part I – Use of Equipment shall apply.

C.2 CREW

C.2.1 LIMITATIONS

(a) The **crew** shall consist of 1 person.

C.3 PERSONAL EQUIPMENT

C.3.1 MANDATORY

(a) The boat shall be equipped with **personal buoyancy** for each crew member to the minimum standard ISO 1240s:5 (CE 50 Newtons), EN 393: 1995 (CE 50 Newtons), or USCG Type III, or AUS PFD 11.

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance with the ISAF Advertising Code. Advertising chosen by the boat's owner or by the person in charge is not permitted.

C.5 PORTABLE EQUIPMENT

C.5.1 FOR USE

(a) OPTIONAL

(1) Electronic or mechanical timing devices

(2) Electronic or magnetic compass

(3) Mooring line

(4) Consumables

(5) Items on deck which functions are storage of food, drink, clothing,

safety or relevant tools or spares.

C.5.2 NOT FOR USE

(a) OPTIONAL

(1) Paddle

(2) Tow line

C.6 BOAT

C.6.1 WEIGHT

minimum

The weight of the **boat** in dry condition ....72 kg

The weight shall be taken excluding **sails** and all portable equipment as listed in C.5 other than permanently fitted mounting brackets.

C.6.2 CORRECTOR WEIGHTS

(a) **Corrector weights** of lead shall be permanently fastened to the **boat** anywhere inside the buoyancy compartment when the **boat** weight is less than the minimum requirement.

(b) The total weight of such **corrector weights** shall not exceed 5 kg. See also rules B.1.1.

C.7 HULL

C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

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

MAINTENANCE

(a) The **hull** may be **polished.**

(b) The **hull** may be **painted**.

(c) The **hull** may be **sanded** but only in such a way as to facilitate painting.

REPAIR

(a) The **hull** may be repaired in such a way that it shall not change the shape or basic weight distribution

MODIFICATIONS

(a) Holes may be made in the **hull** for the fixing of fittings. Backing pads of a suitable material (e.g. nylon) must be placed under the fittings for attachment purposes.

(b) Placement of line bags, and additional fairleads, cleats, jammers and pad eyes is permitted but see (a) above.

(c) Vinyl may be added to the **hull** to facilitate advertising or personal graphics.

(d) Non-skid tape or patches made from a flexible material not greater than

3mm thick may be attached to the internal surfaces and deck moulding.

C.7.2 FITTINGS

(a) USE

(1) Hand hole covers and drainage plugs shall be kept in place at all times.

(2) Fittings are optional except that hydraulics shall not be permitted.

(3) The use of plastic and other adhesive tapes is unrestricted.

C.8 HULL APPENDAGES

C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

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

MAINTENANCE

(a) The **hull appendages** may be **polished.**

(b) The **hull appendages** may be **painted**.

(c) The **hull appendages** may be **sanded** but only in such a way as to facilitate painting.

REPAIR

(a) **Hull appendages** may have minor scratches and abrasions and damaged edges repairs and faired in to return them to the original shape.

(b) Tillers may be repaired as necessary.

MODIFICATIONS

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

C.8.2 LIMITATIONS

(a) Only one **centreboard** and one **rudder** blade shall be used during an event of less than 5 consecutive days, except when a **hull appendage** has been lost or damaged beyond repair.

C.8.3 CENTREBOARD

(a) USE

(1) The top part of the **centreboard** may be marked to show various angles.

C.8.4 RUDDER

(a) USE

(1) The **rudder** blade angle is optional.

C.9 RIG

C.9.1 MODIFICATIONS, MAINTENANCE AND REPAIR

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

MAINTENANCE

(a) The **spars** may be **polished** or **painted.**

(b) Fitting and spars may be modified to accommodate larger diameter bolts or rivets

(c) **Spars** may be **re-finished**.

REPAIR

(a) Spars may be repaired.

MODIFICATIONS

(e) Running rigging may be replaced.

C.9.2 FITTINGS

(a) USE

(1) Fittings are optional except that hydraulics shall not be permitted.

C.9.3 LIMITATIONS

(a) Only one set of **spars** and standing **rigging** shall be used during an event of less than 5 consecutive days, except when an item has been lost or damaged beyond repair.

C.9.4 MAST

(a) USE

(1) The **spar** shall be stepped in the mast step in such a way that the heel is not capable of moving more than 3 mm.

C.9.5 BOOM

(a) DIMENSIONS

	minimum	maximum
Limit mark width	10 mm	
Boom point distance	2160 mm	

(b) USE

(1) 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° to the mast **spar**.

C.9.7 STANDING RIGGING

(a) USE

(1) Shroud attachments, links and rigging screws shall not be adjusted.

(2) The Forestay may be adjusted.

C.9.8 RUNNING RIGGING

(a) USE

(1) The lead of the mainsail sheet, **vang**, clew out haul and Cunningham is optional.

(2) The use of shock cord is unrestricted.

(3) The mainsail tack inhaul shall not be adjusted.

C.10 SAILS

C.10.1 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.

(a) **Repairs** and cleaning are permitted.

(b) Addition of tell tales

(c) Addition of camber stripes

(d) Battens may be placed in the **batten pockets**

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

C.10.2 LIMITATIONS

(a) Not more than 1 mainsail shall be carried aboard.

(b) Not more than 2 mainsails shall be used during an event of less than 5 consecutive days, except when a sail has been lost or damaged beyond repair. The 2 sails must be of the same size (Standard or Small)

C.10.3 MAINSAIL

(a) USE

(1) The **sail** shall be hoisted on a halyard. The arrangement shall permit hoisting and lowering of the **sail** at sea.

(2) The highest visible point of the **sail**, projected at 90° to the mast **spar**, shall not be set above the lower edge of the mast **upper limit mark**. 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**.

(3) The **Luff** bolt rope shall be in the **spar** groove or track.

(4) The full length battens shall be in the pockets at all times whilst sailing.

Section D – Hull

D.1 PARTS

D.1.1 MANDATORY

(a) Hull

D.2 GENERAL

D.2.1 RULES

(a) The **hull** shall comply with the Building Specification in force at the time of manufacture**.**

D.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) **Hull** repairs, modifications and maintenance shall be carried out so that the **boat** continues to comply with the **class rules** and no substantial stiffness or other advantage has been gained by the repairs or modifications.

D.2.3 IDENTIFICATION

(a) The hull shall carry the sail number and Hull identification number on the transom.

D.2.4 BUILDERS

(a) The **hull** shall built only by the LM or its licensee.

D.3 HULL SHELL, DECK, BUOYANCY AND ASSOCIATED STRUCTURE

D.3.1 MATERIALS & CONSTRUCTION

(a) The **hull** shall be built in accordance with the specifications set out by the LM.

D.4 ASSEMBLED HULL

D.4.1 FITTINGS

(a) MANDATORY

The following fittings shall be positioned in accordance with the LM Specifications:

(1) Forestay sheave

(2) Shroud plates

(3) Mast step

(b) OPTIONAL

Other fittings are optional except that hydraulics shall not be permitted

Section E – Hull Appendages

E.1 PARTS

E.1.1 MANDATORY

(a) **Centreboard**

(b) **Rudder**

E.2 GENERAL

E.2.1 RULES

(a) **Hull appendages** shall comply with the **class rules** in force at the time of **certification**.

E.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

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

E.3 CENTREBOARD

E.3.1 MANUFACTURERS

(a) Manufacturers shall be licensed by the LM.

E.3.2 MATERIALS & CONSTRUCTION

(a) The **centreboard** shall be constructed within the specifications issued by the LM.

E.4 RUDDER BLADE, RUDDER STOCK AND TILLER

E.4.1 MANUFACTURERS

(a) Manufacturers shall be licensed by the LM.

E.4.2 MATERIALS & CONSTRUCTION

(a) The **rudder** shall be constructed within the specifications issued by the LM.

Section F – Rig

F.1 PARTS

F.1.1 MANDATORY

(a) **Mast**
(b) **Boom**
(c) Standing **rigging**
(d) Running **rigging**

F.2 GENERAL

F.2.1 RULES

(a) The **spars** and their fittings shall comply with the **class rules** in force at the time of **certification** of the **spar**.

(b) The standing and running **rigging** shall comply with the **class rules**.

F.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

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

F.2.3 CERTIFICATION

(a) The **official measurer** shall **certify spars.**

(b) No **certification** of standing and running **rigging** is required.

F.2.4 DEFINITIONS

(a) MAST DATUM POINT

The **mast datum point** is the **heel point.**

F.2.5 MANUFACTURER

(a) A licence from the LM is required. Licences have been issued to Super Spars Ltd. and Selden Masts Ltd.. New or replacement spars must be procured through the LM.

F.3 MAST

F.3.1 MATERIALS

(a) The **spar** shall be of carbon fibre.

(b) An external track may be aluminium, carbon fibre or plastic

(b) Permitted surface finish shall be anodised or of polish or resin or paint/varnish

F.3.2 CONSTRUCTION

(a) The **spar** extrusion shall include a fixed sail groove or track which may or may not be integral with the **spar**

(b) Other construction details are optional.

F.3.3 FITTINGS

(a) MANDATORY

(1) Mast head fitting
(2) Shroud and forestay fittings
(3) A set of spreaders
(4) Mainsail halyard sheave box
(5) Gooseneck
(6) Heel fitting

(b) OPTIONAL

(1) Exit for halyard or external fitting for halyard
(2) External halyard lock
(3) One or two mechanical wind indicators
(4) Compass bracket
(5) Fittings for permitted control lines

F.3.5 DIMENSIONS

	minimum	maximum
Mast length	5770 mm	5800 mm
Mast spar cross section		
fore-and-aft	65 mm	70 mm
transverse	53 mm	60 mm
Mast limit mark width	10 mm	

Lower point height ..... 323 mm
Upper point height..... . 5713 mm
Lower point to **upper point** .... 5390 mm
Forestay height ..... 3100 mm 3745 mm
Shroud height ..... 3780 mm 3800 mm
Spreader;
length ..... 350 mm .. 450 mm
height ..... …2000 mm 2140 mm
Distance from **mast datum point** as defined in F.2.3
to centre of gravity in condition as described in
ERS H.4.6 .....2300 mm

F.3.16 WEIGHTS

	minimum	maximum
Mast weight	4.5 kg	

F.4 BOOM

F.4.1 MATERIALS

(a) The **spar** shall be of Carbon Fibre.

(b) Permitted surface finish shall be of polish or resin or paint/varnish.

F.4.2 CONSTRUCTION

(a) The **spar** extrusion construction is optional

F.4.3 FITTINGS

(a) Fittings are optional.

F.4.5 DIMENSIONS

	minimum	maximum
Boom spar cross section at any point;		
vertical	70 mm	.... 95 mm
transverse	70 mm	.... 75 mm
Overall length of **Boom spar**.....	mm	2390 mm

F.4.16 WEIGHTS

	minimum	maximum
Boom weight	1.4 kg	

F.5 STANDING RIGGING

F.5.1 MANDATORY

(a) One pair of shrouds

(b) One adjustable forestay

F.5.2 MATERIALS

(a) The shrouds **rigging** shall be of stainless steel.

(b) The forestay material is optional.

F.5.3 CONSTRUCTION

(a) Optional.

F.5.4 FITTINGS

(a) Optional.

F.6 RUNNING RIGGING

F.6.1 MANDATORY

(a) Mainsail halyard
(b) Mainsail sheet
(c) **Vang**
(d) Mainsail outhaul
(e) Mainsail Cunningham line
(f) Forestay control line
(g) Mainsail tack inhaul

F.6.2 MATERIALS

(a) The construction, purchase and materials of the running rigging are optional.

F.6.3 FITTINGS

(a) Fittings are optional.

Section G – Sails

G.1 PARTS

G.1.1 MANDATORY

(a) Mainsail

G.2 GENERAL

G.2.1 RULES

(a) **Sails** shall comply with the **class rules** in force at the time of **certification**.

G.2.2 CERTIFICATION

(a) The **official measurer** shall **certify** mainsails in the **tack** and shall sign and date the **certification mark**.
(b) RYA Class and Sail measurers may measure Hadron H2 Sails
(c) The **Certification Authority** may appoint one or more persons at a sailmaker to measure and **certify sails** produced by that manufacturer in accordance with the WS In-house Certification Guidelines.

G.2.3 SAILMAKER

(a) A licence from the LM is required. Only one licence has been issued: to HD Sails Ltd. New or replacement sails must be procured through the LM.

G.3 MAINSAIL

G.3.1 IDENTIFICATION

(a) The class insignia shall conform with the dimensions and requirements as detailed in the diagram contained in Section H and be placed above and below the third batten from the **head.**

(b) The Sail numbers and optional national letters shall be placed in accordance with RRS Appendix G.

G.3.2 MATERIALS

(a) The **ply** fibres shall consist of ZZ One design Racing Black Technora 2 mil - Reference ZZ04.

(b) **Stiffening** shall consist of:

(1) Headboards: Plastic, GRP or Aluminium

(2) Battens: GRP, Foam or a combination of.

(c) **Sail reinforcement** shall consist of materials permitted in the **body of the sail.**

G.3.3 CONSTRUCTION

(a) The construction shall be: **soft sail**, **single ply sail**.

(b) The **body of the sail** shall consist of woven and/or **laminated ply** throughout.

(c) The **sail** shall have 5 batten **pockets** in the **leech**. Battens shall be removed for sail measurement.

(d) All batten pockets shall be full length and extend from **luff** to **leech.**

(e) The top batten shall intersect the **leech** immediately below the **aft head point**.

(f) The following are permitted: Stitching, glues, tapes, bolt ropes, corner eyes, headboard with fixings, Cunningham eye or pulleys, **batten pocket** patches, **batten pocket** end caps, mast slides, leech line with cleat, **windows**, tell tales, sail shape indicator stripes, chafe patches and items as permitted or prescribed by other applicable rules.

G.3.4 DIMENSIONS – STANDARD SAIL

All standard sails shall be made to the HD Sails pattern reference Hadron2Proto9_4. No variation is allowed. The following dimensions are thus for information only.

Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured.

	minimum	maximum
Leech length		5270 mm
Quarter width		2060 mm

Half width		1805 mm
Three-quarter width		1345 mm
Top width		900 mm
Head point to intersection of **leech** and centreline of second **batten pocket**	1300 mm	1340 mm
Head point to intersection of **luff** and centreline of uppermost **batten pocket**	530 mm	570 mm
Head point to intersection of **luff** and centreline of second **batten pocket**	860 mm	900 mm
Aft head point to intersection of **leech** and centreline of second **batten pocket**	540 mm	580 mm
Clew point to intersection of **leech** and centreline of lowermost **batten pocket**	1270 mm	1310

G.3.5 DIMENSIONS – SMALL SAIL

Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured.

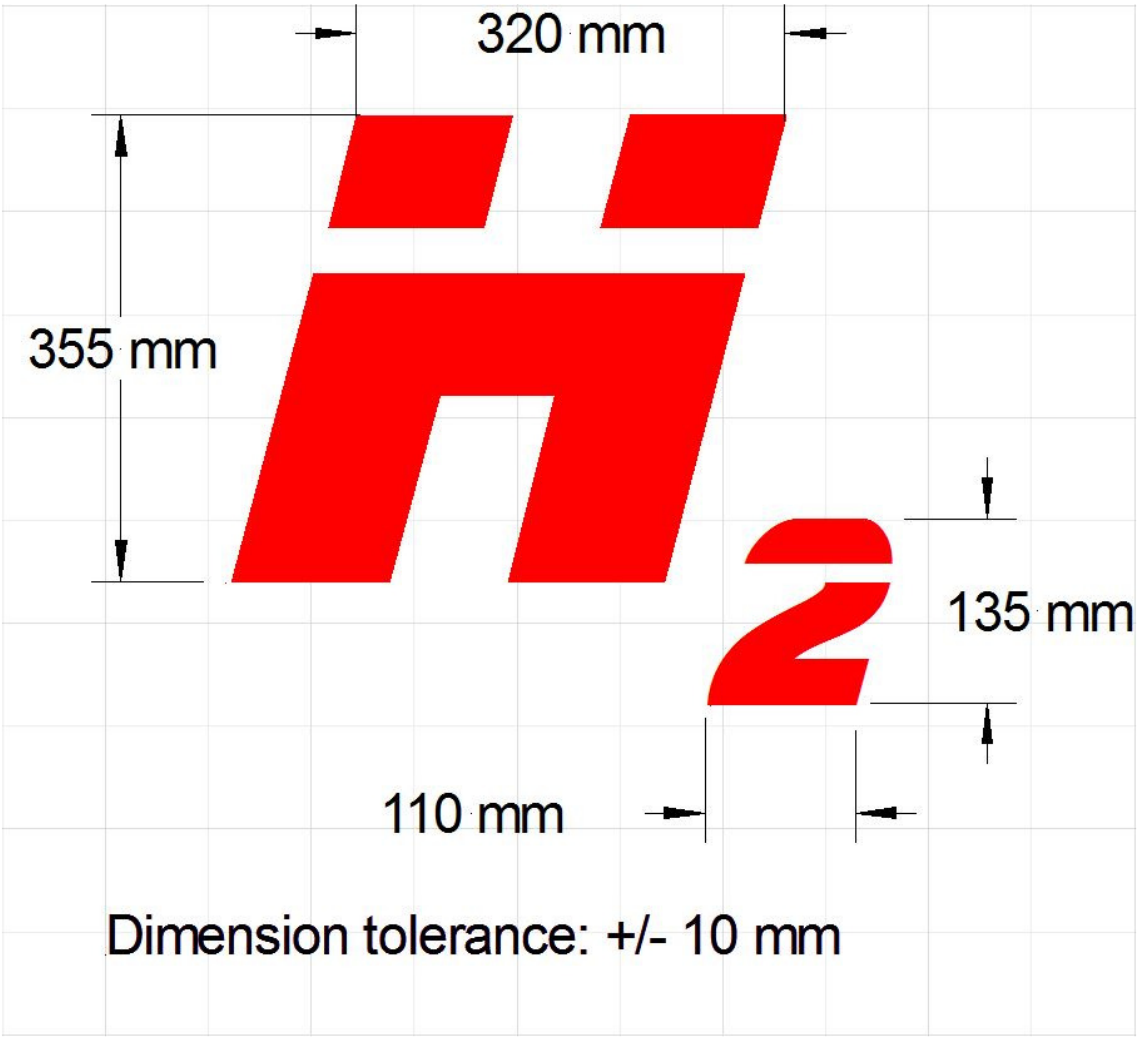
	minimum	maximum
Leech length		5105 mm
Quarter width		1840 mm
Half width		1515 mm
Three-quarter width		1055 mm
Top width		455 mm
Head point to intersection of **leech** and centreline of second **batten pocket**	895 mm	925 mm
Head point to intersection of **luff** and centreline of uppermost **batten pocket**	575 mm	610 mm
Head point to intersection of **luff** and centreline of second **batten pocket**	890 mm	920 mm
Aft head point to intersection of **leech** and centreline of second **batten pocket**	535 mm	575 mm
Clew point to intersection of **leech** and centreline of lowermost **batten pocket**	1270 mm	1310 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



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