

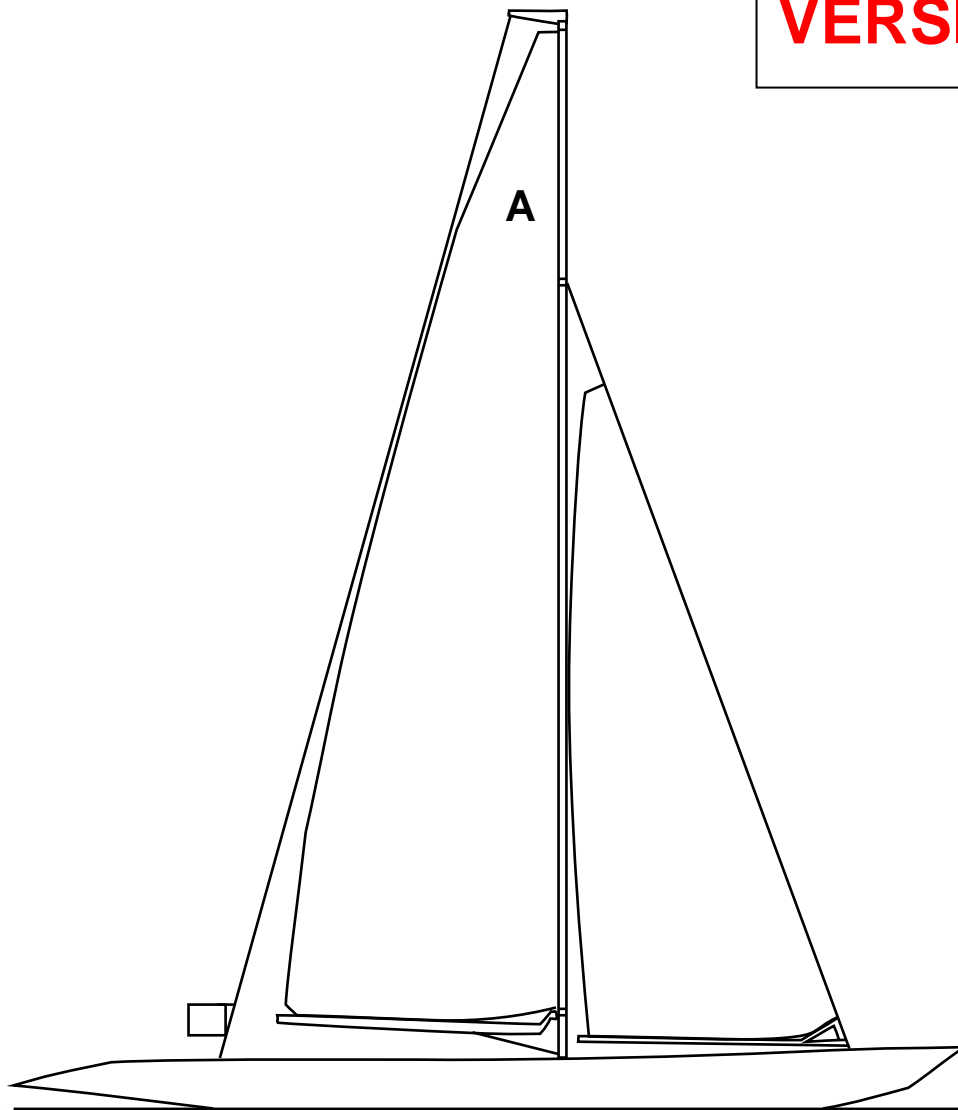


INTERNATIONAL A CLASS RULES



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VERSION 8.5



The Yachting Monthly 6 Metre Class rating rule was devised in 1922 by Major Malden Heckstall-Smith and was adopted as the International A Class in 1927.

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INTRODUCTION

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

Certification and alterations

*A Class **hulls, hull appendages, rigs and sails** are **certified by certification measurement**.*

*A Class **hulls, hull appendages, rigs and sails** may, after initial **certification measurement**, only be altered to the extent permitted in Section C of the class rules.*

Responsibility

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

*It is the responsibility of the owner and any other person in charge to ensure that a boat is maintained to comply with her class rules and that her **certificate** remains valid (RRS 78.1).*

Deviations outside of tolerances

*When an **equipment inspector** or **official measurer** for an event decides that a **boat** does not comply the class rules RRS 78.3 obliges him to make a report in writing to the Race Committee. When a Race Committee receives such a report they are obliged to protest the boat (RRS 60.2).*

When the protest committee finds that deviations in excess of tolerances specified in the class rules are not caused by normal wear and tear and/or do improve the performance of the boat, it shall penalise her.

When deviations between a boat's measurements and her certificate cannot be corrected as required by RRS 64.3 (a), the protest committee may consider accepting that the boat shall be brought into rating in another configuration before racing again.

If the protest committee decides that a class rule has deliberately or knowingly been breached by an owner, competitor, or crew they may call a hearing under rule 69.

Class rules

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.

*The **class rules** for the International A Class are **open class rules** in which anything not specifically prohibited by the **class rules** is permitted, where individual rules require, permit, or prohibit as necessary.*

PART I – ADMINISTRATION

Generic Part 1 rules are being developed for all three classes

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 comprise **open class rules** where anything not specifically prohibited is permitted and **closed class rules** where anything not specifically permitted is prohibited.

Certification control and **equipment inspection** shall be carried out in accordance with the current ERS except where varied in this Part.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

The following ERS rules shall not apply:

- (a) B.1.2 Mast Lower Limit Mark
- (b) B.1.3 Boom Outer Limit Mark

C.2 CREW

C.2.1 LIMITATIONS

- (a) The **crew** shall consist of one person.
- (b) The **crew** shall not be substituted during an event

C.3 ADVERTISING

C.3.1 LIMITATIONS

The **boat** may display only such advertising as permitted by the ISAF Advertising Code.

C.4 BOAT

C.4.1 MEASUREMENT TRIM

When checked as in H.2.1:

- (a) the forward flotation waterline length ending shall fall at or aft of the forward flotation waterline length **limit mark**.
- (b) the aft flotation waterline length ending shall fall at or forward of the aft flotation waterline length **limit mark**.

C.4.2 LIMITATIONS

- (a) The **boat** shall sail with the **hull appendages** and **ballast** used at the **certification measurement** relating to the **certificate**.

- (b) The **boat, rig** and **sails** shall comply with the dimensions recorded on the **certificate**.

C.5 HULL

C.5.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The geometry of the **hull** shall not be changed during an event.
- (b) The **hull** may be altered subject to C.4.1, C.4.2 and the rules of Section D.

C.5.2 IDENTIFICATION

The **hull** registration number shall be displayed on the external surface of the **hull** clearly and legibly with a minimum height of 20 mm.

C.6 HULL APPENDAGES

C.6.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The **hull appendages** may be altered subject to C.4.1, C.4.2 and the rules of Section E.

C.6.2 LIMITATIONS

The same **hull** appendages shall be used during an event except when a **hull appendage** has been lost or damaged beyond repair. Such replacement may be made only with the approval of the race committee.

C.6.3 USE

The **hull appendages**:

- (b) shall not be retractable and
- (d) except for **rudder(s)** and/or **trim tab(s)** which may each rotate about a single axis, shall not be movable.

C.7 RIG

C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The **rig** may be altered subject to C.4.2, C.7.2, C.7.3 and the rules of Section F.

C.7.2 LIMITATIONS

The **boat** shall sail with the same **mast spar** and **main boom spar** on board as those used during the **certification control** relating to the **certificate** used for the event.

C.7.3 MAST

The forward edge of the **mast spar** at the deck shall not be more than 13 mm from the forward edge of the **mast deck limit mark**.

C.7.4 MAIN BOOM

The intersection of the aft edge of the **mast spar** and the **main boom spar** datum line, each extended as necessary, shall not be below the upper edge of the **mast lower limit mark**. Figure I.10.

C.7.5 HEADSAIL BOOM

The **headsail boom** shall not extend aft of the foreside of the **mast**.

C.8 SAILS

C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The **sails** may be altered subject to C.4.2 and the rules of Section G.

C.8.2 LIMITATIONS

- (a) One **mainsail** shall be set when *racing*.
- (b) The **mainsail luff** length shall not be less than 1390 mm.

C.8.3 MAINSAIL

(a) IDENTIFICATION

- (1) Sail identification marks shall comply with the RRS.
- (2) The class insignia shall be the letter "A" of dimensions: height 25-30 mm, width 20-25 mm, thickness 5-7 mm. The insignia shall be placed above the **three quarter width**.

(b) USE

- (1) The **tack point**, projected at 90° to the **mast spar**, shall not be set below the upper edge of the **mast lower limit mark**.
- (2) **Luff** ropes shall be in the **spar** grooves or tracks.
- (3) The **sail** shall not be reefed.

C.8.4 HEADSAIL

(a) IDENTIFICATION

Sail identification marks shall comply with the RRS.

(b) USE

- (1) When the **headsail** is held on the centreplane it shall not extend forward of a straight line between the foretriangle height **limit mark** and a point on the deck distance J forward of the forward edge of the **mast spar**.
- (2) The **forestay**, **headsail luff spar** or **headsail boom** swivel shall be attached approximately on the boat's centreplane.
- (3) The minimum J dimension with which the **headsail** complies shall not exceed the J dimension for the **boat**.

C.9 EQUIPMENT

C.9.1 PROHIBITED

- (a) Automated control of **rig** and/or **sails**.
- (b) Automated steering and/or navigation.
- (c) On board camera(s).
- (d) The use of pictures from any source while *racing*.

C.9.2 USE

- (a) Except for the establishment and maintenance of a radio control link, control unit positioning information, and signal strength and battery status information, no radio transmissions from the boat shall be used while racing.
- (b) Remote control and related equipment, if temporarily removed and/or replaced:
 - (1) shall be refitted in the same position.
 - (2) shall be replaced by equipment of similar weight.

C.9.3 OWNER'S FLAG

The owner's racing flag, rectangular in shape and of minimum dimensions 70 mm wide x 60 mm high shall be flown in the **rigging** when *racing*.

C.10 EQUIPMENT INSPECTION

C.10.1 AT AN EVENT

- (a) When **equipment inspection** is carried out at an event without access to full **certification measurement** equipment, the **boat** shall comply with the **class rules** and **certificate** within the following tolerances:

	lower tolerance	upper tolerance
Rig and sail dimensions	no lower limit	0
Mast position dimension, K	minus 1	1
Boat weight	minus 0.1 kg	0.1 kg
Flotation waterline length, FLWL	minus 3	3
Measured waterline length, MLWL	minus 3	3
Draught, measured to flotation waterline		
length limit marks	no lower limit	2
Freeboard, measured to flotation waterline		
length limit marks	minus 2	no upper limit

- (b) When **equipment inspection** is carried out at an event with full **certification measurement** equipment, the **boat** in **measurement**

trim, shall comply with the **class rules** and **certificate** within the tolerances in C.4.1, C.10.1 (a) and the following tolerances:

	lower tolerance	upper tolerance
Quarter beam length excess	no lower limit	5
Draught, measured to waterplane	no lower limit	1
Freeboard, measured to waterplane	-1	no upper limit
Rating, found from new measurements	no lower limit	5

- (c) When a **boat** does not comply with the tolerances in C.10.1 (a) and C.10.1 (b), unless RRS 64.3 (a) applies:
- (1) it shall be corrected before *racing*, or a revised **certificate** shall be issued,
 - (2) RRS 78.1 has been broken,
 - (3) the **boat** shall be disqualified in any races in which she has taken part,
 - (4) the **crew** may be subject to protest under RRS 69.

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Section D – Hull

D.1 GENERAL

D.1.1 RULES

The **hull** shall comply with the **class rules**:

- (a) in force at the time of its initial **certification measurement** or,
- (b) those relating to its **measurement certificate** or,
- (c) with the current **class rules**.

D.1.2 CERTIFICATION

See Rule A.11.

D.1.3 DEFINITIONS

The deck datum point is defined as the intersection of a transverse line, minimum 50 mm long, engraved in, bonded in or moulded into a non-removable part of the deck, and the centreplane.

D.1.4 IDENTIFICATION

The **hull** registration number shall be marked in an easily visible location on a non-removable part of the **hull** by any of the following means: painting on,

engraving in, bonding in, moulding in.

D.2 HULL

D.2.1 MATERIALS

- (a) The forward 20 mm of the **hull** shall be made of elastomeric material.
- (b) Except in remote control equipment, the density of material shall not exceed that of lead (11,340 kg/m³)

D.2.2 MEASUREMENT

- (a) Where there is concavity in the bow profile at the forward flotation waterline length measurement point, the measured waterline length measurement point shall be taken as the intersection of the waterplane and a bridging line. Figures I.3 and I.4.
- (b) If the bridging line contacts the bow profile more than 20 mm below the waterplane, the bridging line shall be shortened so that the lower point of contact of the bridging line with the **hull** is 20 mm below the waterplane. Figure I.3.
- (c) If any underwater part of the **hull** projects beyond the flotation waterline length measurement point the projection shall be included in the measured waterline length. Figure I.2.
- (d) The port and starboard quarter beam lengths shall not differ by more than 25 mm.

D.2.3 CONSTRUCTION

- (a) The **hull** shall be a **monohull**.
- (b) On every transverse section below the waterplane no point A shall be more than 3 mm below any other point which is on the skin girth between point A and the underwater centreplane.
- (c) The sheerline between a point 25 mm aft of the foremost point on the **hull** and the aft freeboard measurement point shall be a fair and continuous concave curve.
- (d) With the following exceptions, hollows in the surface of the **hull** between the waterplane and a distance 10 mm below the sheerline are prohibited:
 - (1) forward of the forward flotation waterline length measurement point,
 - (2) hollows which do not exceed 2 mm in depth when checked with a straight edge 300 mm long,
 - (3) hollows which do not exceed 0.5 mm in depth when checked with a straight edge 50 mm long within a 50 mm radius of the QBL measurement points and the waterline beam measurement points.
- (e) Except as in (f) the positive or negative deck round at every section between a point 25 mm aft of the foremost point on the **hull** and the aft freeboard measurement point shall not exceed one twenty-fourth of the local beam measured deck edge to deck edge. Figure I.6.

- (f) Local projections, hollows, recesses and voids in the deck, no bigger than are reasonably required for their purpose, are permitted for the following:
 - (1) a handle,
 - (2) the **mast**
 - (3) a **headsail** luff **spar**,
 - (4) access to rc equipment,
 - (5) deck edge rail.
- (g) The deck datum point shall be aft of the **mast**.

D.2.4 LIMIT MARKS

- (a) **Limit marks** shall:
 - (1) contrast strongly with the colour of the surface they are placed on,
 - (2) be of uniform width between 2 mm and 6 mm wide,
 - (3) be long enough to be clearly visible when the **boat** is afloat.
- (b) Placement of **limit marks**
 - (1) The forward flotation waterline length **limit mark** shall be placed on the **hull** shell with the aft edge at or forward of the forward flotation waterline length measurement point.
 - (2) The aft flotation waterline length **limit mark** shall be placed on the **hull** shell with the forward edge at or aft of the aft flotation waterline length measurement point.
 - (3) The **mast** deck **limit mark** shall be placed on the deck with the forward edge at the **mast** measurement point.
 - (4) The foretriangle deck **limit mark** shall be placed on the deck with the aft edge at the foretriangle deck measurement point.
 - (5) Where it is possible to move the **mast** fore and/or aft, additional **limit marks** shall be placed 13 mm fore and/or aft of the **mast** deck **limit mark** and foretriangle deck **limit mark**.
- (c) Where there are extensions to the flotation waterline length, as in H.5.18, measured waterline length **limit marks** shall be placed on the **hull** shell as follows:
 - (1) The forward measured waterline length **limit mark** shall be placed with the aft edge at or forward of the forward measured waterline length measurement point.
 - (2) The aft flotation waterline length **limit mark** shall be placed with the forward edge at or aft of the aft measured waterline length measurement point.

Section E – Hull Appendages

E.1 PROHIBITED

- (a) **Hull appendages** that join the **hull** more than 25 mm from the centreplane.
- (b) **Hull appendages** that join the **hull** aft of the aft flotation waterline length **limit mark**.
- (c) **Hull appendages** that join the **hull** forward of the point where the bow profile is 20 mm below the waterplane.
- (d) **Hull appendages** that cut the waterplane outboard of the flotation waterline **limit marks**.
- (e) **Hull appendages** that extend outboard of the maximum beam.
- (f) **Ballast** with a higher density than that of lead (11,340 kg/m³).

E.2 RULES

The **hull appendages** shall comply with the **class rules**:

- (a) in force at the time of its initial **certification measurement** or,
- (b) those relating to the boat's **certificate** or,
- (c) with the current **class rules**.

E.3 MEASUREMENT

If any underwater part of the **hull appendages** with a maximum thickness of more than 20 mm projects beyond the flotation waterline length **limit marks**, the whole projection shall be included in the measured waterline length. Figure I.1.

Section F – Rig

F.1 PARTS

A **rig** shall consist of no more than:

- (a) one **mast**,
- (b) one headsail luff **spar**,
- (c) one **main boom**,
- (d) one **headsail boom**,
- (e) **standing rigging**,
- (f) **running rigging**,
- (g) wind indicators.

F.2 GENERAL

F.2.1 RULES

- (a) The **spars** and their fittings shall comply either with the **class rules** in force at the time of the initial **certification measurement** of the **hull** or with the current **class rules**.
- (b) The **standing rigging** and **running rigging** shall comply with the current **class rules**.

F.2.2 DEFINITIONS

The mast position dimension, K, is defined as the distance between the deck datum point and the forward edge of the **mast deck limit mark**.

F.2.3 MEASUREMENT

Using the method given in the ERS, the mast spar curvature shall be tested between the foretriangle height **limit mark** and the point where the **mast** cuts the deck or the lowest point of the **mast** whichever is higher.

F.3 MAST

F.3.1 CONSTRUCTION

- (a) Rotating fairings and rotating **masts** are prohibited.
- (b) Any fitting that is faired into the **spar** shall be considered to be part of the **spar**.

F.3.2 DIMENSIONS

	minimum	maximum
Mast spar curvature as defined in F2.3	minus 10	10
Upper point to mast deck limit mark , H		2167
Foretriangle height limit mark to deck limit mark , I		1625
Limit mark width	2	6

F.3.3 LIMIT MARKS

- (a) **Limit marks** shall contrast strongly with the colour of the surface they are placed on.
- (b) The following **limit marks** shall be applied to the **mast**:
 - (1) an **upper limit mark**,
 - (2) a foretriangle height **limit mark**,
 - (3) a **lower limit mark**.

F.4 MAIN BOOM

F.4.1 DEFINITION

The **main boom spar** datum line is taken through the upper edge of the **spar**. Figure I.9.

F.4.2 CONSTRUCTION

(a) Any fitting that is faired into a **spar** shall be considered to be part of the **spar**.

(b) No fitting shall be bigger than is reasonably required for its purpose.

F.4.3 DIMENSIONS

When measured at any point on the **spar**, the **boom spar cross section**, taken perpendicular to the **main boom spar** datum line shall not exceed the following:

	maximum
Vertical boom spar cross section	25
Transverse boom spar cross section	25

Section G – Sails

G.1 SAIL PLAN

The sail plan shall consist of one **mainsail** and, optionally, no more than one **headsail**.

G.2 GENERAL

G.2.1 RULES

The **sails** shall comply either with the **class rules** in force at the time of their initial **certification measurement** or with the current **class rules**.

G.2.2 CERTIFICATION

(a) The **official measurer** shall **certify** mainsails and headsails in the **tack** with his signature and date.

(b) The **official measurer** shall mark each **mainsail** in the **tack** with the smallest B dimension with which the **sail** complies.

(c) The **official measurer** shall mark each **headsail** in the **tack** with the smallest J dimension with which the **sail** complies.

G.2.4 MEASUREMENT

- (a) During measurement:
 - (1) battens need not be removed,
 - (2) stays not exceeding 2 mm in diameter inside luff **tabling** need not be removed,
 - (3) tell tales overlapping the **leech** and **foot** shall be removed.
- (b) The **luff perpendicular**, **quarter width**, **half width** and **three-quarter width** shall be taken:
 - (1) on a **sail** with the **luff** set in a track in the **spar**: to the aft edge of the **spar**,
 - (2) on other **sails**: to the **luff**,
 - (3) discontinuous attachments on the **luff** shall be disregarded provided their total length measured along the **luff** does not exceed 10% of the **luff** length and the longest attachment is no more than twice the shortest,
 - (4) with hollows in the **leech** and/or **luff** bridged using the method described in the ERS H.5.2.
- (c) ERS G.4.1 is changed by adding the following:
Alternatively the **clew point** may be defined by a mark on the **sail edge**.
- (d) ERS G.4.3 is changed by adding the following:
Alternatively the **tack point** may be defined by a mark on the **sail edge**.
- (e) Parts of **stiffening** at the head which are less than 2 mm in diameter and not covered by sail material shall not be taken as parts of the **sail**.

G.3 MAINSAIL

G.3.1 DEFINITIONS

G.3.1.1 BATTEN POCKET POINT

The batten pocket point is defined as the intersection of the extended centreline of the batten pocket, or **batten** if there is no batten pocket, and the **leech**.

G.3.1.2 HEADBOARD LIMIT ZONE

The headboard limit zone extends 25 mm fore and aft and 25 mm in height. The maximum distance from the forward edge of the zone to the **head point** is limited to:

- (a) on a **double luff sail**, 15 mm,
- (b) on a **sail** with a luff rope, 5 mm,
- (c) on other **sails**, zero.

G.3.2 CONSTRUCTION

- (a) The construction shall be: **soft sail**.
- (b) The **sail** shall be trilateral bounded by the **luff**, **foot** and **leech**.

- (c) The **sail** shall have no more than four battens or batten **pockets** in the **leech**.
- (d) The **sail** may have **stiffening** at the **head** not extending outside of the headboard limit zone. Figure I.7.
- (e) The **leech** shall not extend more than 10 mm aft of straight lines between:
 - (1) the upper aft corner of the headboard limit zone and the upper batten pocket point .
 - (2) the **clew point** and the lower batten pocket point .
- (f) The **foot** shall not extend more than 25 mm below a straight line between the **tack point** and the **clew point**.

G.3.3 DIMENSIONS

	minimum	maximum
Luff perpendicular where sails and hull are certified before 2016	-	B + 10
Luff perpendicular in other cases	-	B
Quarter width	-	0.75 B + 90
Half width	-	0.5 B + 110
Three-quarter width	-	0.25 B + 105
Aft edge of headboard limit zone to aft head point	-	10
Batten length		
uppermost batten:	-	150
other battens	-	200
Variation in the following measurements: between clew point and adjacent batten pocket point, between batten pocket point and adjacent batten pocket point(s), between head point and adjacent batten pocket point.		40

G.4 HEADSAIL

G.4.1 CONSTRUCTION

The construction shall be: **soft sail**.

G.4.2 DIMENSIONS

	Minimum	maximum
Half width	none	0.5 J + 50
Minimum J	2 x (Half width – 50)	-

PART III – APPENDICES

The rules in Part III comprise **open class rules** where anything not specifically prohibited is permitted and **closed class rules** where anything not specifically permitted is prohibited.

Measurement shall be carried out in accordance with the current ERS except where varied in this Part.

Section H - Rating

H.1 RATING FORMULA

$$\text{Rating} = \frac{L + \sqrt{S}}{4} + \frac{L \times \sqrt{S}}{12 \times \sqrt[3]{D}} + \text{Penalties}$$

where: Rating shall be no greater than 1000 mm
L is the MEASURED LENGTH in mm
S is the MEASURED SAIL AREA in mm²
D is the DISPLACEMENT in mm³
Penalties are as given in H.4

H.2 MEASUREMENT TRIM

H.2.1 The waterplane shall be determined with the boat in **measurement trim** as follows:

- (a) floating in fresh water, rigged, in sailing condition and dry,
- (b) no **sails** on board,
- (c) a 100 gram weight placed with its centre of gravity at the **mast deck limit mark**,
- (d) the **mast spar** vertical with its fore side at the **mast** measurement point,
- (e) the heaviest **headsail boom**, heaviest **headsail luff spar** if used, their fittings and **rigging**,
- (f) slack **standing rigging**.

H.2.2 Except where specified otherwise, the definitions and the measurements used to determine the rating shall relate to the waterplane established with the boat in **measurement trim**.

H.3 BOAT WEIGHT

H.3.1 The boat weight shall be determined in **measurement trim**.

H.4 LIMITATIONS AND PENALTIES

H.4.1 MEASURED SAIL AREA

The measured sail area is found as:
$$S = \frac{A \times B}{2} + \frac{0.85 \times I \times J}{2}$$

where: A is the distance between the **mast upper limit mark** and the **mast lower limit mark**,
B is the largest permitted **mainsail luff perpendicular**,
I is the distance between the deck and the foretriangle **limit mark**,
J is the distance between the **mast deck limit mark** and the foretriangle deck **limit mark**.

H.4.2 DISPLACEMENT

Displacement is unrestricted except that:

- The cube root of the displacement, $\sqrt[3]{D}$, used in the rating formula shall not exceed 0.2 MLWL + 25 mm.
- Where the actual value of $\sqrt[3]{D}$ is less than 0.2 MLWL + 10 mm, then the deficit shall be subtracted from the actual value to obtain the value of $\sqrt[3]{D}$ used in the rating formula.
- The value of $\sqrt[3]{D}$ used in the formula shall not be less than zero.

H.4.3 DRAUGHT

The maximum draught without penalty is 0.16 MLWL + 89 mm. Three times any excess shall be included in the rating.

H.4.4 FREEBOARD

The minimum freeboard without penalty is $0.28 \sqrt[3]{D} + 23$ mm. Any deficit shall be included in the rating.

H.4.5 QUARTER BEAM LENGTH

The maximum QBL without penalty is a percentage of the MLWL where the percentage is $100 - \sqrt{0.02 \text{ MLWL}}$. Half any excess shall be added to the MLWL to give the measured length, L. Figure I.11.

H.5 DEFINITIONS

GENERAL

H.5.1 WATERPLANE

The waterplane is the water surface level remote from the **hull** when in **measurement trim**.

H.5.2 DECK EDGE

The deck edge is taken as the lowest point of contact between the **hull**, ignoring any local projections as in D.2.3 (f), and a tangent at 45 degrees to the horizontal.

H.5.3 SHEERLINE

The sheerline is the deck edge seen in profile.

MEASUREMENT POINTS

H.5.4 FLOTATION WATERLINE LENGTH MEASUREMENT POINTS

The forward and aft flotation waterline length measurement points are where the bow and stern profiles cross the waterplane.

H.5.5 MEASURED WATERLINE LENGTH MEASUREMENT POINTS

(a) The forward measured waterline length measurement point is on the bow profile vertically above the point where the bridging line crosses the waterplane as in D.2.2 (a) and D.2.2 (b).

(b) The aft measured waterline length measurement point is on the stern profile vertically above the aftermost extension of any projections as in D.2.2 (c) and E.3.

H.5.7 FREEBOARD MEASUREMENT POINTS

The freeboard measurement points are the deck edges above the forward and aft measured waterline length measurement points and at a point midway between them.

H.5.8 WATERLINE BEAM MEASUREMENT POINTS

The waterline beam measurement points are located in the waterplane at the point of maximum waterline beam.

H.5.9 QUARTER BEAM MEASUREMENT POINTS

The quarter beam measurement points are located on the external surface of the **hull** shell one tenth of the waterline beam above the waterplane and one quarter of the waterline beam from the centreplane.

H.5.10 MAST MEASUREMENT POINT

The **mast** measurement point is on the deck, on the centreplane and at the leading edge of the **mast spar** when vertical as in H.2.1.

H.5.11 FORETRIANGLE DECK MEASUREMENT POINT

The foretriangle deck measurement point is on the deck, on the centreplane and distance J forward of the **mast** measurement point.

MEASUREMENTS

H.5.12 DRAUGHT FOR CERTIFICATION MEASUREMENT

The draught for **certification measurement** is taken from the lowest point of the **hull appendages** to the waterplane.

H.5.13 DRAUGHT FOR EQUIPMENT INSPECTION

The draught for **equipment inspection** is taken from the lowest point of the **hull appendages** to a line between the flotation waterline length **limit marks**.

H.5.14 DISPLACEMENT (D)

The displacement in mm³ is the boat weight in kilograms multiplied by 1,000,000.

H.5.15 FREEBOARD (F)

The freeboard is the average of the heights above the waterplane of the freeboard measurement points.

H.5.16 WATERLINE BEAM

The waterline beam is the extreme beam at the waterplane.

LENGTHS

H.5.17 FLOTATION WATERLINE LENGTH (FLWL)

The flotation waterline length is the distance between the forward and aft flotation waterline length **limit marks**.

H.5.18 MEASURED WATERLINE LENGTH (MLWL)

The measured waterline length is the flotation waterline length, FLWL, plus the extension where applicable of:

- (a) any bridged hollow in the bow profile as defined in D.2.2 (a) and D.2.2 (b),
- (b) any submerged part of the **hull** that extends beyond the flotation waterline length **limit marks** as in D.2.2 (c).
- (c) any part of a **hull appendage** that extends beyond the flotation waterline length **limit marks** as in E.3.

H.5.19 QUARTER BEAM LENGTH (QBL)

The quarter beam length is the mean distance between the forward and aft quarter beam measurement points.

H.5.20 MEASURED LENGTH (L)

The measured length is the measured waterline length, MLWL, plus half any QBL excess.

H.6 MEASUREMENTS AND CALCULATIONS

H.6.1 Linear measurements of the following:

draught, freeboard, flotation waterline length, measured waterline length, quarter beam length, rig dimensions, sail dimensions,

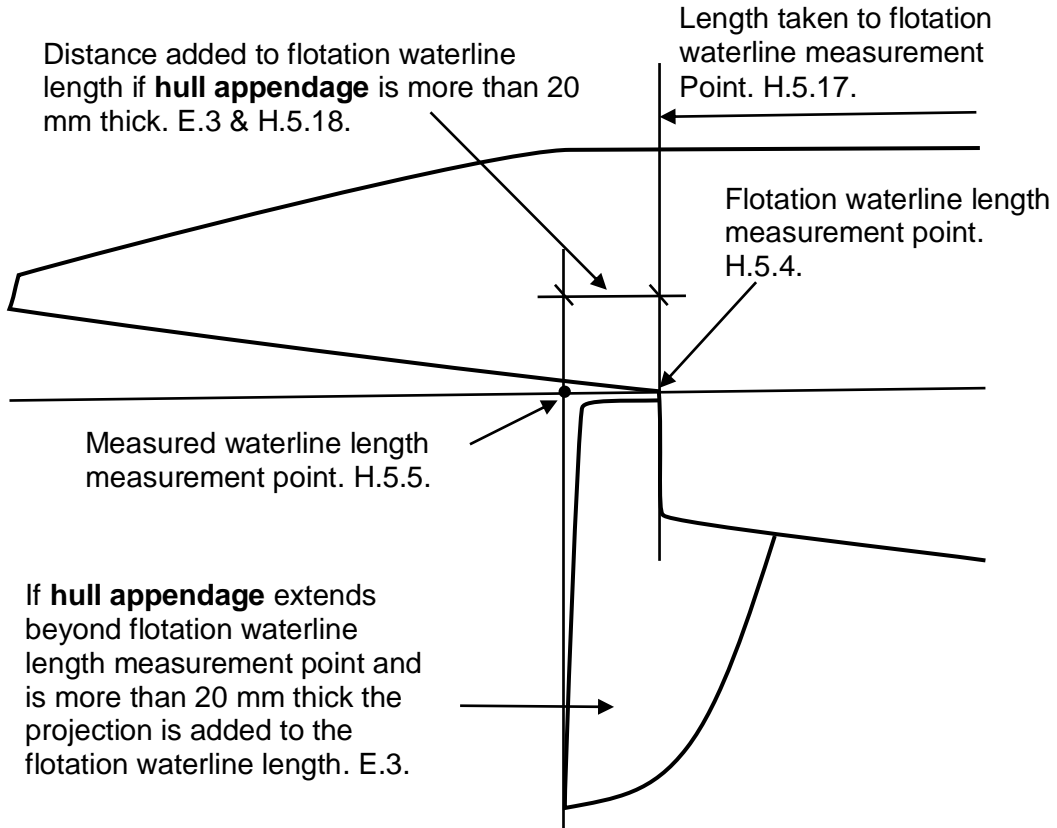
shall be taken in millimetres and rounded up to the nearest whole number before recording on the **certificate**, use in subsequent calculations or comparison with a limiting value.

H.6.2 Maximum and minimum values of linear limitations in the **class rules** or **certificate** are in millimetres and shall be taken as absolute limiting values.

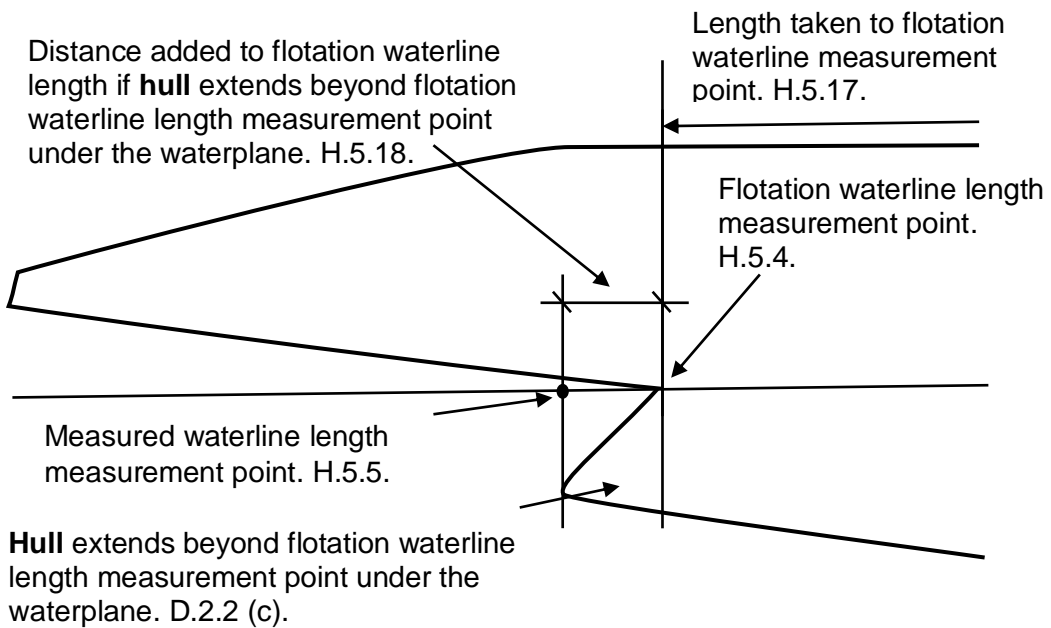
- H.6.3 For **certification measurement** the boat weight shall be taken in kilograms using calibrated equipment and rounded to the nearest 0.1 kg before recording on the **certificate** and use in subsequent calculations.
- H.6.4 For **equipment inspection** the boat weight shall be taken in kilograms using calibrated equipment and rounded to the nearest 0.02 kg before comparison with the limitations on the **certificate**.
- H.6.5 Calculated values shall be rounded up or down to the nearest whole number before recording, use in any subsequent calculations or comparison with any limitation in the **class rules** or **certificate**.

Section I Figures

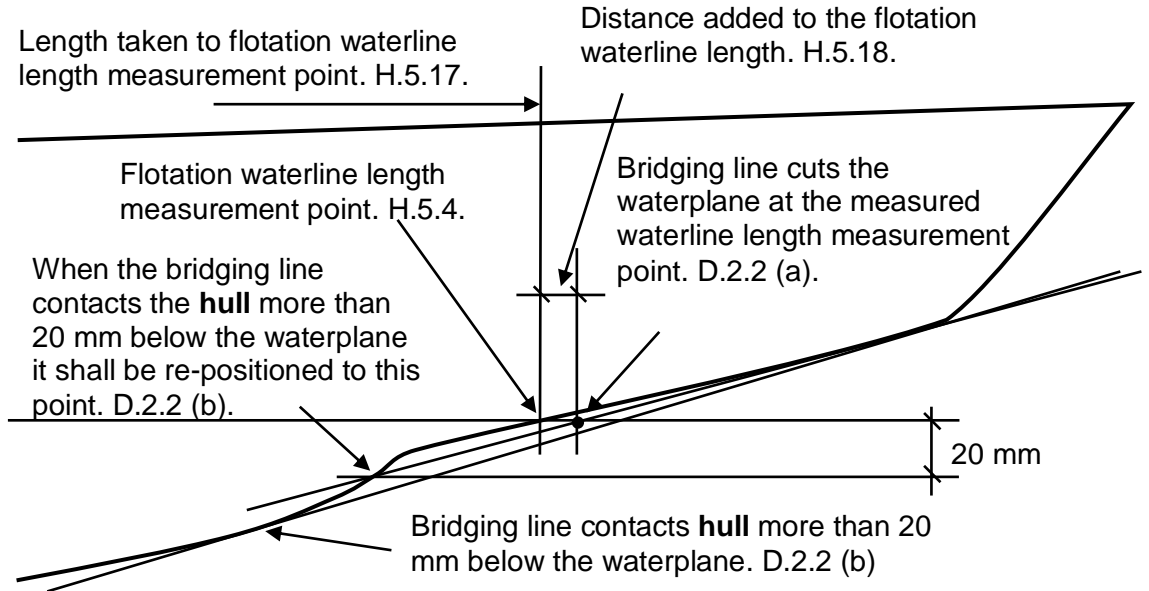
I.1 AFT PROJECTION 1



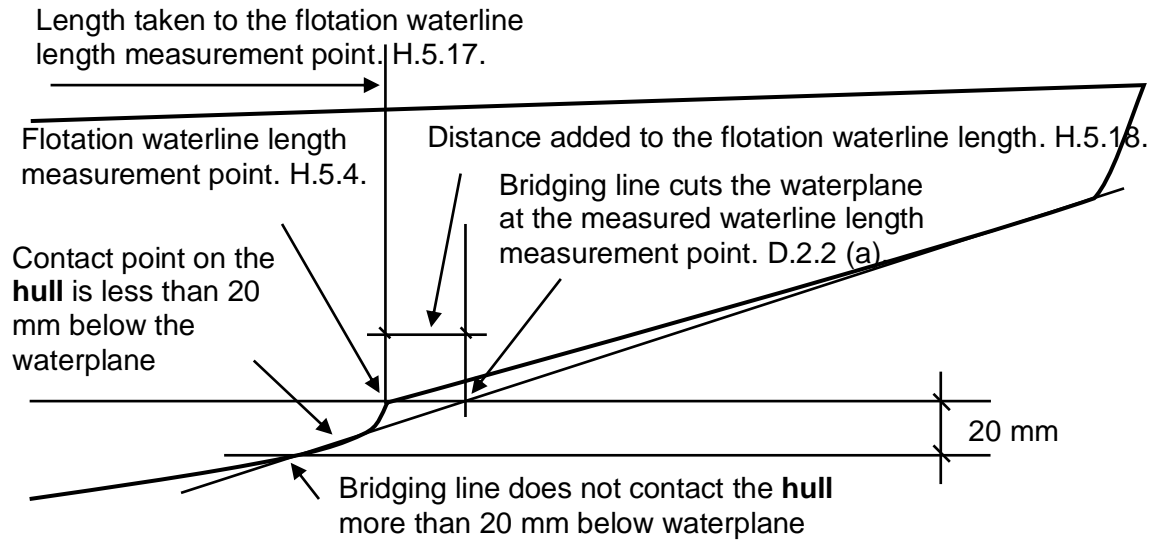
I.2 AFT PROJECTION 2



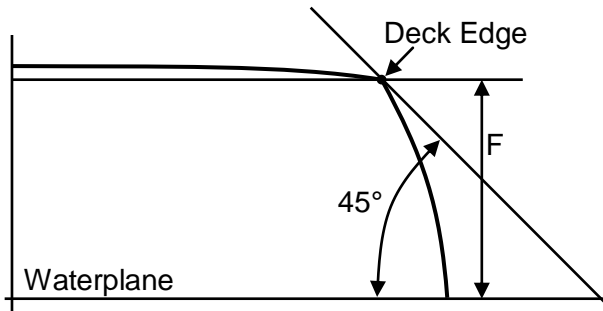
I.3 BOW BRIDGING A



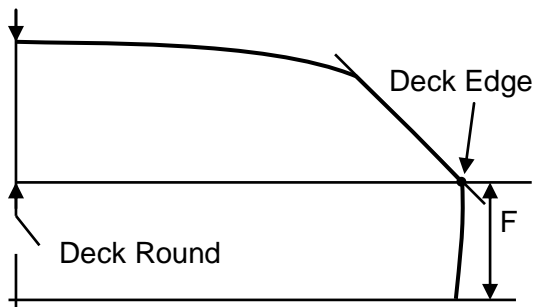
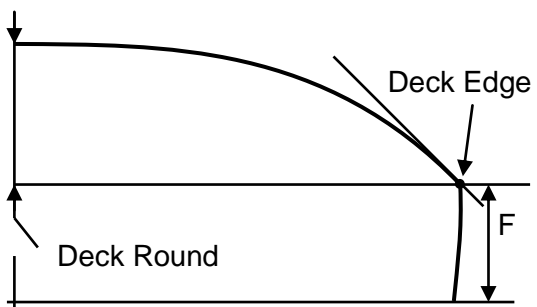
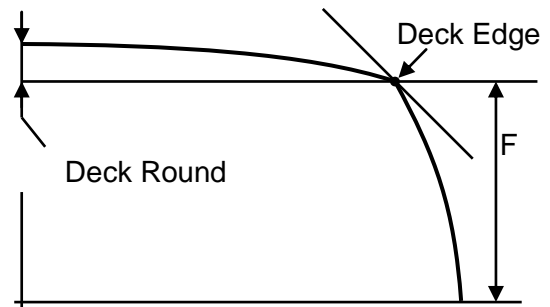
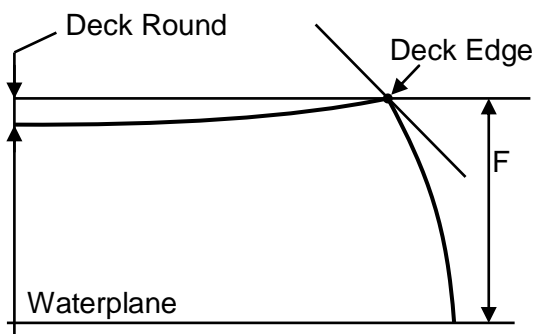
I.4 BOW BRIDGING B



I.5 DECK EDGE, FREEBOARD

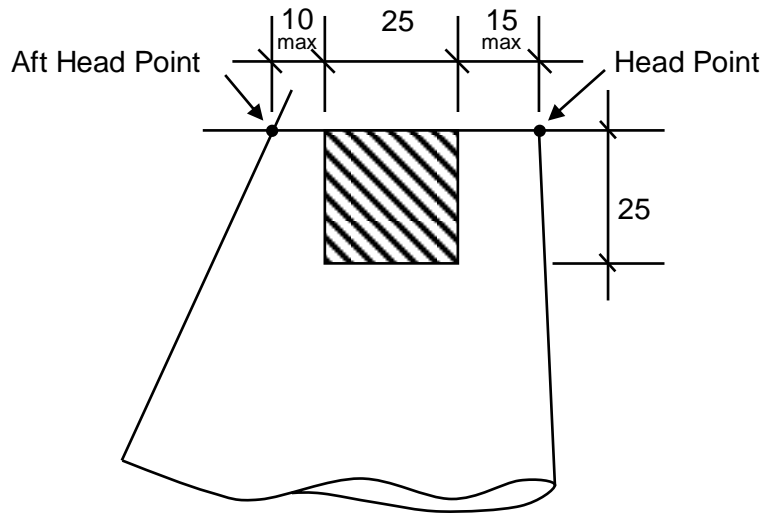


I.6 DECK ROUND, FREEBOARD

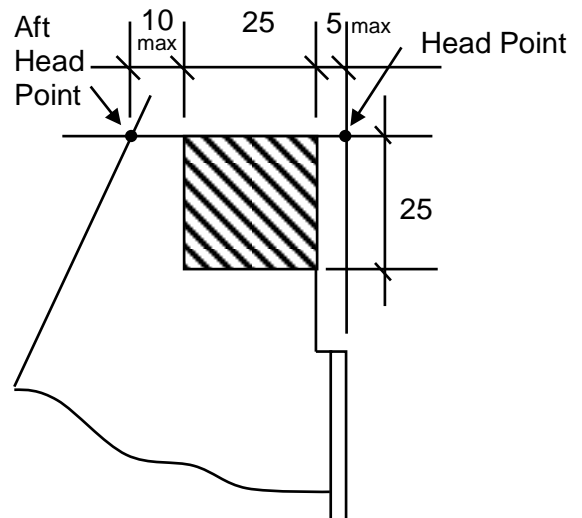


I.7 HEADBOARD LIMIT ZONE

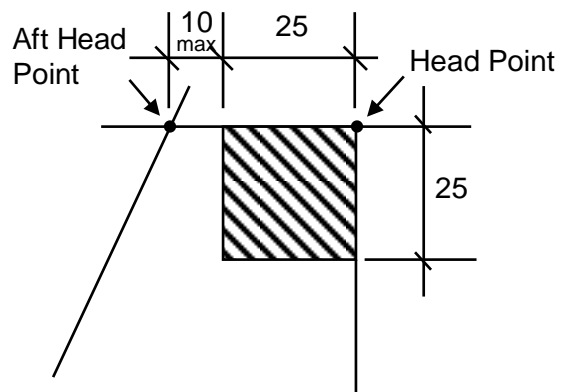
Where the sail has a pocket luff. G.3.1.2 (a).



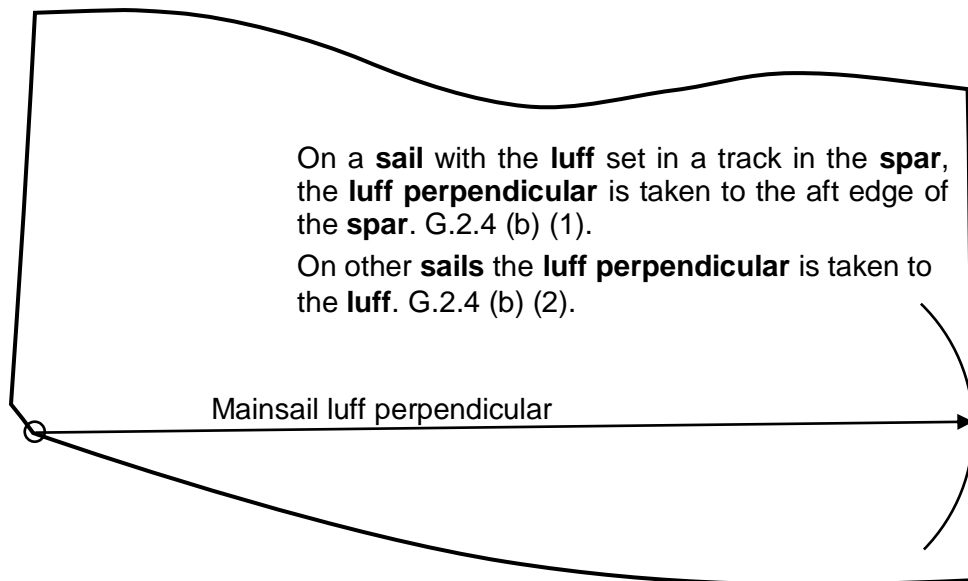
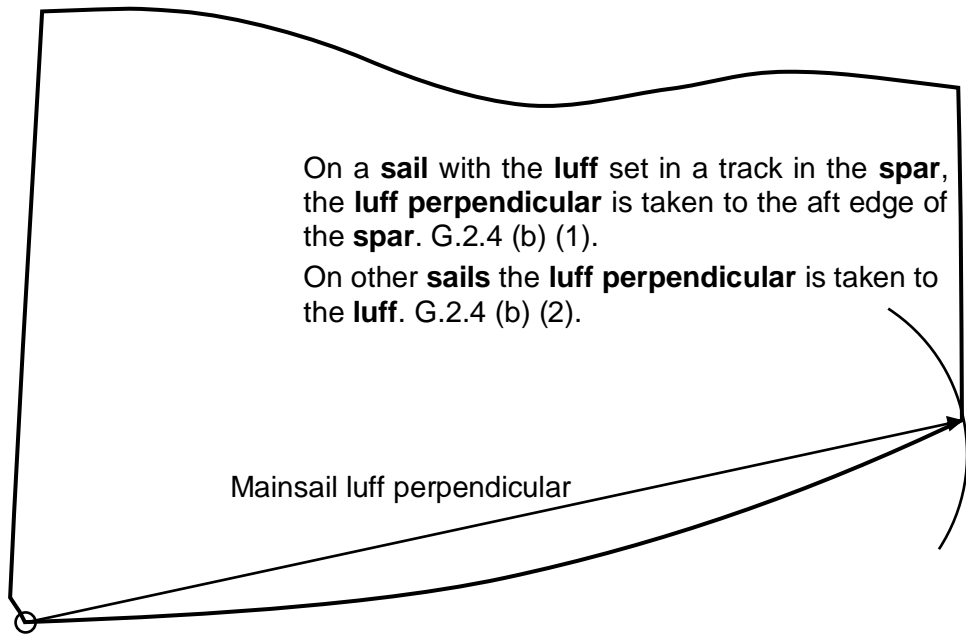
Where the sail has a luff rope or sliders. G.1.3.2 (b).



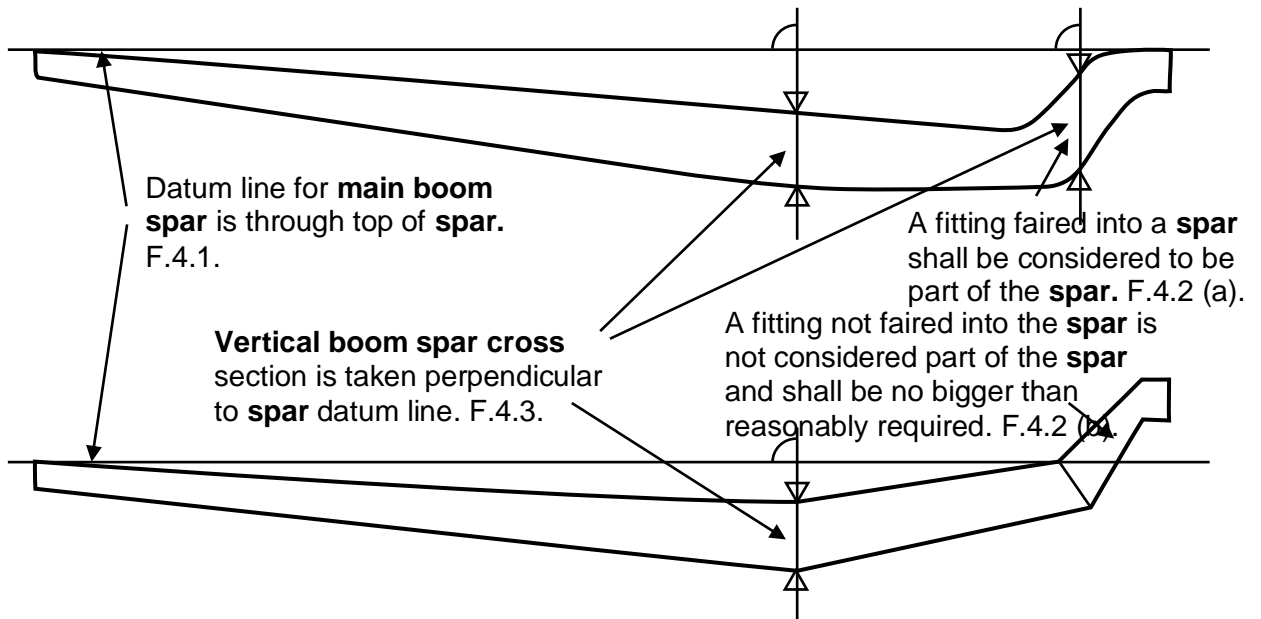
Other sails. G.3.1.2 (c).



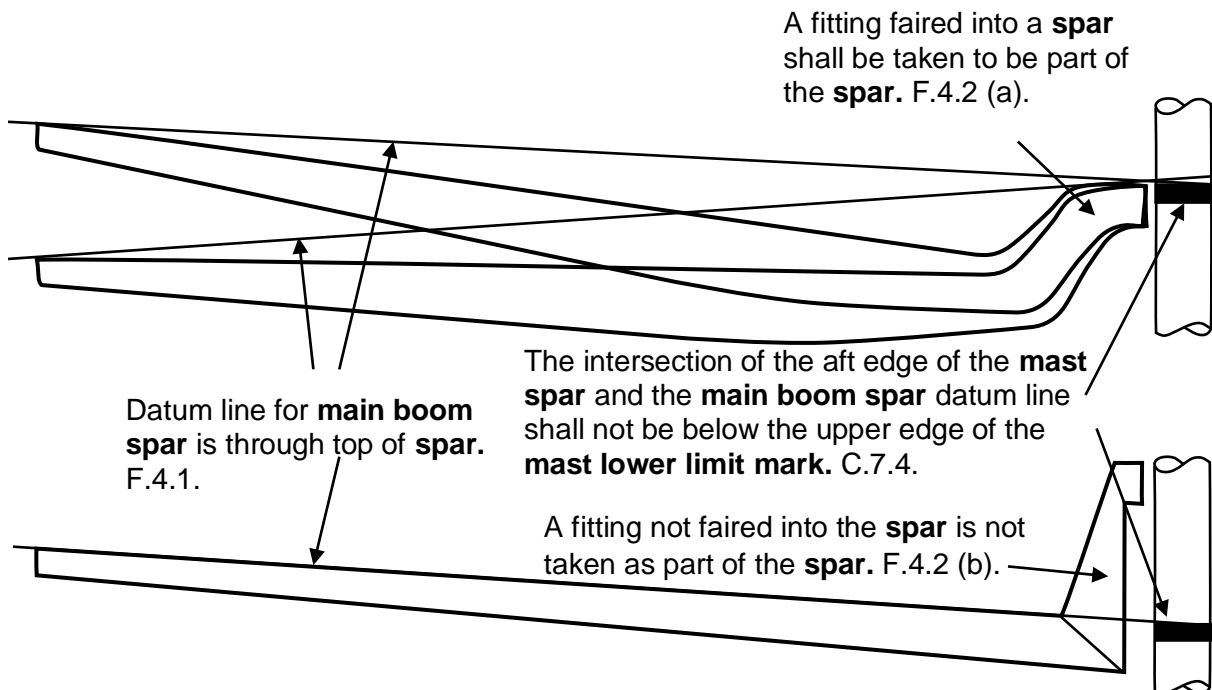
I.8 MAINSAIL LUFF PERPENDICULAR



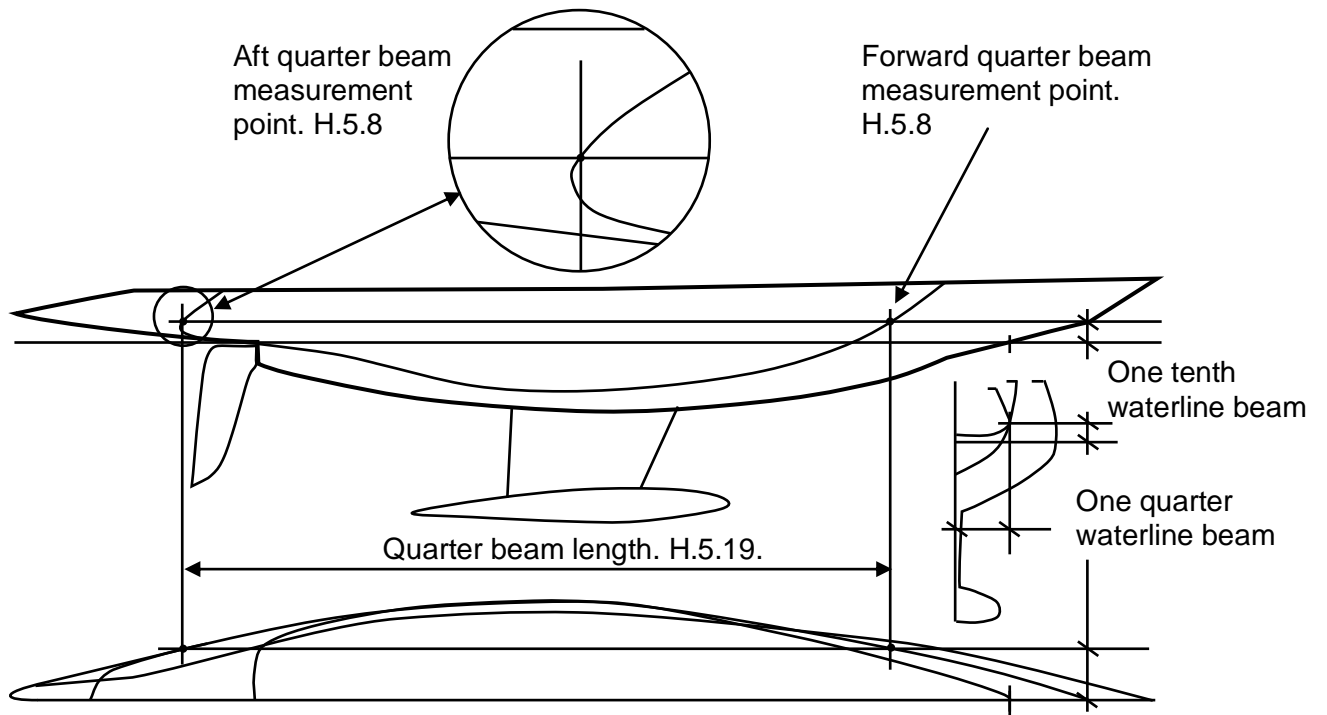
I.9 MAIN BOOM DATUM LINE



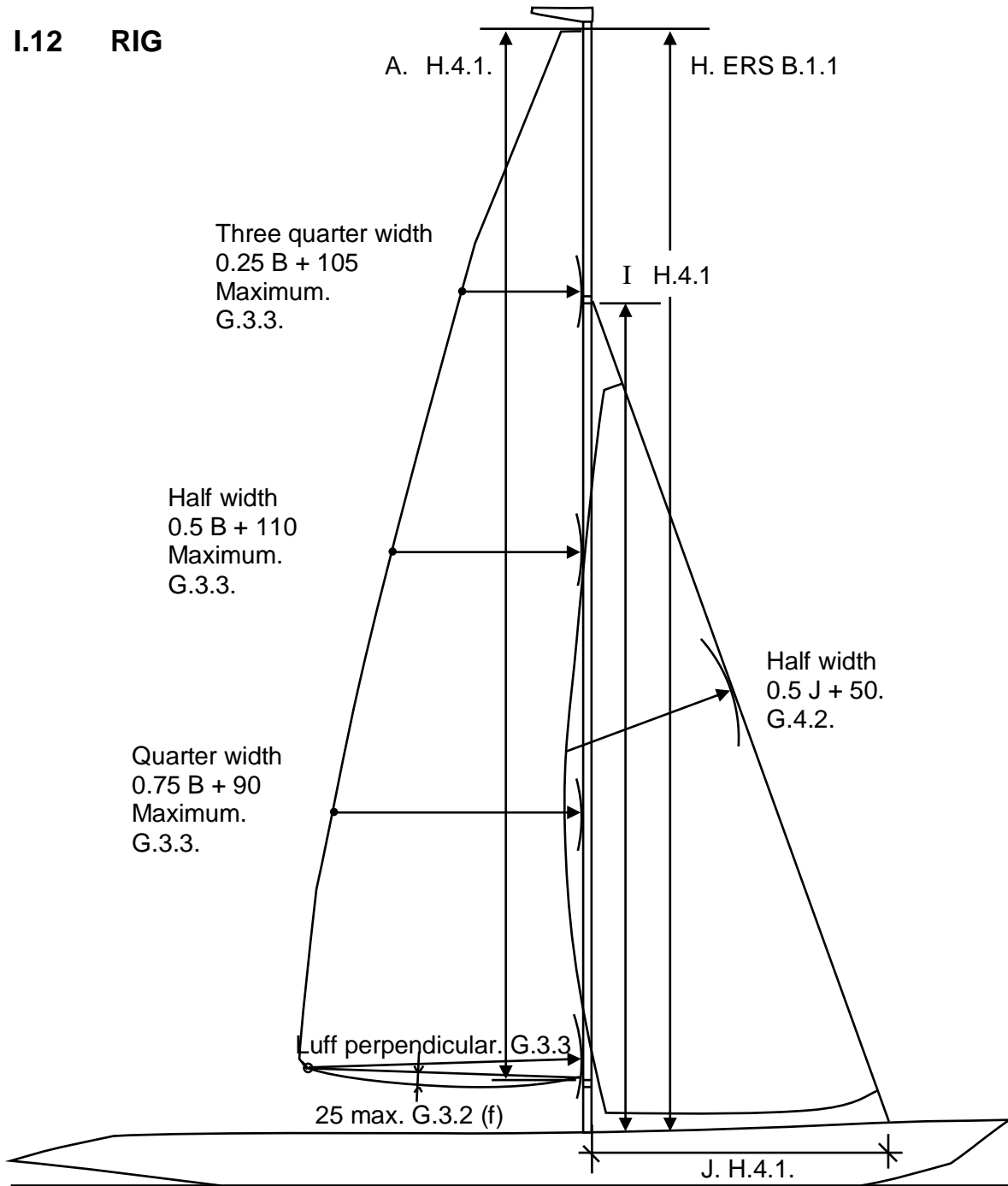
I.10 INTERSECTION OF TOP OF MAIN BOOM WITH MAST



I.11 QUARTER BEAM LENGTH



I.12 RIG



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