

International EUROPE Class Rules

*Authority: INTERNATIONAL YACHT RACING UNION, 60 Knightsbridge, London SW1X 7JX

Date of International status: 1st March 1976

1. GENERAL

- (1) The Europe is a one-design class. The intention of these rules is to ensure that the boats are as alike as possible in all respects affecting performance.
- (2) The official language of the class is English and in the event of dispute over interpretation the English text shall prevail.
- (3) These rules shall be read in conjunction with the official plans, measurement diagram and measurement form. In the event of any discrepancy between them the matter shall be referred to the I.Y.R.U.
- (4) Any interpretation of these rules shall be made by the I.Y.R.U. which may consult the Europe Class Union (ECU). In making such interpretations the I.Y.R.U. shall bear in mind the principle contained in rule (1) above.
- (5) All boats shall be built in accordance with the class rules and measurement form.
- (6) In countries where there is no National Authority (N.A.) or the N.A. does not wish to administer the class, its functions as stated in these rules shall be carried out by E.C.U. or its delegated representatives (National Associations). Where the N.A. has delegated the administration of the class to the National Association the words "National Europe Class Association" replace the words "National Authority" in the following rules.
- (7) Neither the I.Y.R.U. nor E.C.U. accept any legal responsibility in respect of these rules and/or plans or any claim arising therefrom.

2. BUILDERS

- (1) *Professional builders* shall be licensed by the I.Y.R.U. to build boats of the Europe class. Applications for a building licence shall be made in writing to the I.Y.R.U. who shall seek the approval of the E.C.U. and the appropriate National Authority. Any builder who builds boats for sale will be considered to be a professional builder.
- (2) An *Amateur builder* shall be permitted to build not more than one boat a year for his own use.

3. BUILDING FEE

- (1) The building fee is U.S. \$20.00, or its equivalent in other currencies, of which \$5.00 is due to the I.Y.R.U., \$10.00 is due to E.C.U. and \$5.00 is due to the National Europe Class Association.
- (2) The amount of the building fee may be reviewed by the I.Y.R.U. in consultation with E.C.U.
- (3) The building fee shall be paid by the builder on every boat built, whether or not it is subsequently measured and registered. Payment shall be made direct to the I.Y.R.U. which will issue a plaque which shall be deemed to be the receipt for the building fee.

4. REGISTRATION AND MEASUREMENT CERTIFICATE

- (1) No boat is permitted to race in the class unless it has a valid measurement certificate.
- (2) The certificate is obtained as follows:
 - (i) The builder shall apply to the National Authority for a sail number enclosing the building fee or building fee receipt. The National Authority shall issue a sail number only on receipt of evidence that the building fee has been paid.
 - (ii) The boat shall be measured by a measurer officially recognized by the N.A. The completed measurement form shall be supplied to the owner of the boat.
 - (iii) The owner shall send the completed measurement form to his N.A. together with any registration fee that may be required. On receipt of this the N.A. may issue a certificate to the owner.
- (3) Change of ownership invalidates the certificate but shall not necessitate remeasurement. The owner may apply to his N.A. for a new certificate, returning the old certificate together with any re-registration fee that may be required and stating the necessary particulars. A certificate shall then be issued to the new owner.
- (4) It is the owner's responsibility to ensure that his boat, spars, sails and equipment comply with the class rules at all times and that alterations or repairs to the boat, spars, sails or equipment do not invalidate the certificate.
- (5) Notwithstanding anything in these rules the I.Y.R.U. or N.A. shall have the power to refuse to grant a certificate to, or withdraw a certificate from, any boat.

5. IDENTIFICATION MARKS

- (1) Each boat shall have (i) permanently fixed and clearly visible the official I.Y.R.U. plaque and (ii) have the name of the builder clearly shown on the hull.
- (2) Each sail shall have an official E.C.U. sail label sewn on the sail near the tack.
- (3) Each N.A. shall issue sail numbers consecutively starting from 1.

* The I.Y.R.U. is not a National Authority as described in the rules.

6. MEASUREMENT

- (1) Only a measurer officially recognized by a N.A. shall measure a boat, its spars, sails and equipment and sign the declaration on the measurement form that they comply with the class rules.
- (2) The measurer shall report on the measurement form anything which he considers to be a departure from the intended nature and design of the boat, or to be against the general interest of the class, and a certificate may be refused, even if the specific requirements of the rules are satisfied.
- (3) A measurer shall not measure a boat, spars, sails or equipment owned or built by himself, or in which he is an interested party or has a vested interest.
- (4) All boats shall be measured using the official templates supplied by the I.Y.R.U.
- (5) New or substantially altered sails shall be measured by an official measurer who shall stamp or sign and date the sails near the tack. The details shall be recorded on the certificate and the entry signed by the measurer or secretary of the N.A.
- (6) All boats and their equipment shall be liable to remeasurement at the discretion of the N.A. or race committee.

7. HULL

- (1) The hull, deck, side tanks, bulkhead and centreboard case shall be made of only wood, plywood or glass reinforced plastic, or a combination of these materials. The use of foam sandwich, balsa wood sandwich construction, carbon or boron fibres or other fibres of similar properties is specifically prohibited.
- (2) The hull shell, decks, sidetanks, bulkhead and centreboard case shall be constructed generally in accordance with the official plans except where otherwise permitted under these rules and shall comply with the measurements and tolerances laid down in these rules and the measurement form.
- (3)
 - (i) The aft measurement point shall be the intersection of the keel line with the transom, both projected if necessary.
 - (ii) The 'aft measurement plane' shall be a plane through the aft measurement point perpendicular to the base line. It is vertical.
 - (iii) The 'base line' shall be as shown on the measurement diagram. It is horizontal.
- (4) The following shall conform with:
 - (i) One watertight bulkhead at $2000\text{ mm}\pm 20\text{ mm}$ from the aft measurement plane. The bulkhead shall have a hatch with a watertight cover capable of resisting accidental dislodgement and shall be kept in place at all times when racing.
 - (ii) A thwart of minimum width 60 mm and minimum thickness 15 mm shall connect the two side tanks with the upper part of the centreboard case.
 - (iii) Rubbing strakes shall not be wider than:
 - (a) 20 mm at the stem
 - (b) 20 mm at the transom including overlap of the transom from the aft measurement plane.
 - (c) 40 mm elsewhere.The maximum depth of the rubbing strake shall nowhere exceed 25 mm.
 - (iv) The centre of the hole in the deck for the mast shall be $2700\text{ mm}\pm 20\text{ mm}$ from the aft measurement plane.
 - (v) Each side tank shall have at least one drainage hole which shall be closed at all times while racing.
 - (vi) Holes in the transom are permitted but shall not exceed 0.02 m^2 in total area.
 - (vii) The lower mast bearing may be adjustable over a total distance of not more than 50 mm fore and aft. Any adjustment system shall not extend aft of a point 500 mm forward of station 6.
 - (viii) The top of the centreboard case slot shall be parallel to the base line within a tolerance of 10 mm.

8. BUOYANCY

- (1) There shall be not less than three separate buoyancy compartments. For the purpose of this rule the compartment forward of the bulkhead shall be considered to be a buoyancy compartment.
- (2) The side tanks shall be watertight.
- (3) On first measurement the measurer shall be satisfied that the tanks are watertight and he may order a buoyancy test to be carried out.

9. CENTREBOARD

- (1) The centreboard shall be made with only the following materials: wood, plywood, g.r.p., and plastic foam, or a combination thereof.
- (2) The profile of the centreboard shall comply with the profile shown on the measurement diagram.
- (3) The maximum thickness of the centreboard shall be $20\text{ mm}\pm 2\text{ mm}$.
- (4) The shape of the cross sections of the centreboard is optional.
- (5) The weight of the centreboard shall not exceed 5 kg.

10. RUDDER

- (1) The rudder blade shall be made with only the following materials: wood, plywood, g.r.p. and plastic foam, or a combination thereof.
- (2) The profile of the rudder blade shall comply with the profile shown on the measurement diagram.
- (3) The maximum thickness of the rudder blade shall be $20\text{ mm}\pm 2\text{ mm}$.
- (4) The shape of the cross sections of the rudder blade is optional.
- (5) The rudder blade shall not extend below a point 600 mm below the underside of the hull at the transom.
- (6) The rudder blade shall be able to pivot about its axis. A fixed rudder blade is prohibited.

11. MAST

- (1) The mast shall be of wood, aluminium alloy, g.r.p. or a combination thereof. The use of carbon fibre is permitted in g.r.p. masts.
- (2) The construction of the mast is free except as controlled by these rules.
- (3) The mast shall pivot on its heel and shall not be supported by any standing rigging. The halliard shall not be used to support the mast.
- (4) The diameter at the deck including mast ring if fitted, shall not exceed 80 mm.
- (5) The diameter at the heel, including protection ring, if fitted, shall be $50\text{ mm} \pm 2.5\text{ mm}$.
- (6) The distance from the heel to the centre of the deck bearing ring shall be $450\text{ mm} \pm 5\text{ mm}$.
- (7) The aft face of the mast shall be straight but a permanent set due to distortion of 40 mm shall be permitted.
- (8) Two distinctively coloured bands not less than 20 mm wide shall be permanently marked on the mast as follows:
 - (i) With its upper edge not more than 335 mm above the sheerline at the station 3.
 - (ii) With its lower edge not more than 4570 mm above the upper edge of the other band.
- (9) The gap between the bearing surfaces on the boat and the mast shall not exceed 5 mm at the deck or at the heel.
- (10) The minimum weight of the mast including fixed fittings but excluding the halliard shall be not less than 5.5 kg.
- (11) The centre of gravity of the mast in the same condition as in (10) above shall be not less than 1900 mm from the heel.
- (12) If the mast is found to be underweight or if the centre of gravity is too low, corrector weights not exceeding 0.5 kg shall be permanently fastened to the outside of the mast above deck level.
- (13) The mast bearings shall not be adjusted while racing.
- (14) The mast shall be fitted in the boat so that it will not come out of the mast step during a capsizing.

12. BOOM

- (1) The boom shall be of wood, aluminium alloy, g.r.p. or a combination thereof. The use of carbon fibre is permitted in g.r.p. booms.
- (2) The construction of the boom is free except as controlled by these rules.
- (3) A metal boom shall have the same cross section throughout its whole length.
- (4) The boom without fittings shall be capable of passing through a circle of diameter 76 mm.
- (5) The depth of the boom shall be not less than 60 mm. Wooden booms may be tapered aft of the forward edge of the band.
- (6) The boom shall be straight but a permanent set due to distortion of 20 mm shall be permitted.
- (7) A distinctively coloured band not less than 20 mm wide shall be permanently marked on the boom with its forward edge not more than 2740 mm from the aft side of the mast.
- (8) The overall length of the boom shall not exceed 2890 mm.
- (9) The boom shall be connected to the mast in such a way that the mast and boom rotate together.
- (10) The upper edge of the forward end of the boom shall be not lower than the top of the lower band on the mast.

13. WEIGHT

- (1) The hull in dry and clean condition shall with normal fixed fittings weigh not less than 45 kg.
- (2) Fixed fittings are those which are screwed, glued or bolted to the hull.
- (3) If the hull is found to weigh less than 45 kg lead correctors not exceeding 5 kg total weight shall be fastened to the bulkhead not lower than 200 mm from the bottom of the hull. The weight and sail number of the boat shall be stamped on the correctors. The weight and number of these correctors shall be recorded on the measurement certificate.
- (4) The total weight of the boat ready to sail, but excluding the equipment listed in rule 16 shall be not less than 63 kg.

14. SAIL

- (1) The sail shall be made and measured in accordance with the 1975 I.Y.R.U. Measurement Instructions.
- (2) The mainsail shall be made of woven cloth of even weight throughout, except that a window not exceeding 0.30 m^2 may be fitted.
- (3) No part of the sail shall extend beyond the inner edge of the boom band, the lower edge of the upper mast and upper edge of the lower mast band.
- (4) The headboard shall be as on the sail measurement diagram. No part of the board shall be more than 138 mm from the luff of the sail including bolt rope.
- (5) The following measurements shall be taken:
 - (i) Leech: distance in a straight line from upper corner of headboard to the clew shall not exceed 5320 mm.
 - (ii) The leech shall not be concave when smoothed out and without tension.
 - (iii) The width of the sail at half height shall not exceed 1680 mm measured from the mid-point of the leech to the nearest point on the luff including the bolt rope.
 - (iv) Three or four battens shall be fitted which shall divide the aft edge of the sail into four or five equal parts $\pm 50\text{ mm}$.
 - (v) The total length of the battens shall not exceed 2350 mm. The forward end of any batten shall be not less than 150 mm from the aft side of the mast or from the boom.

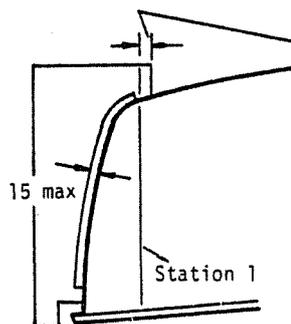
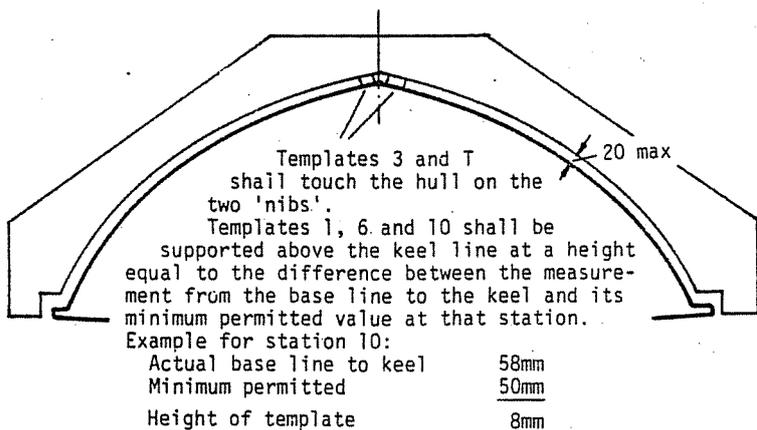
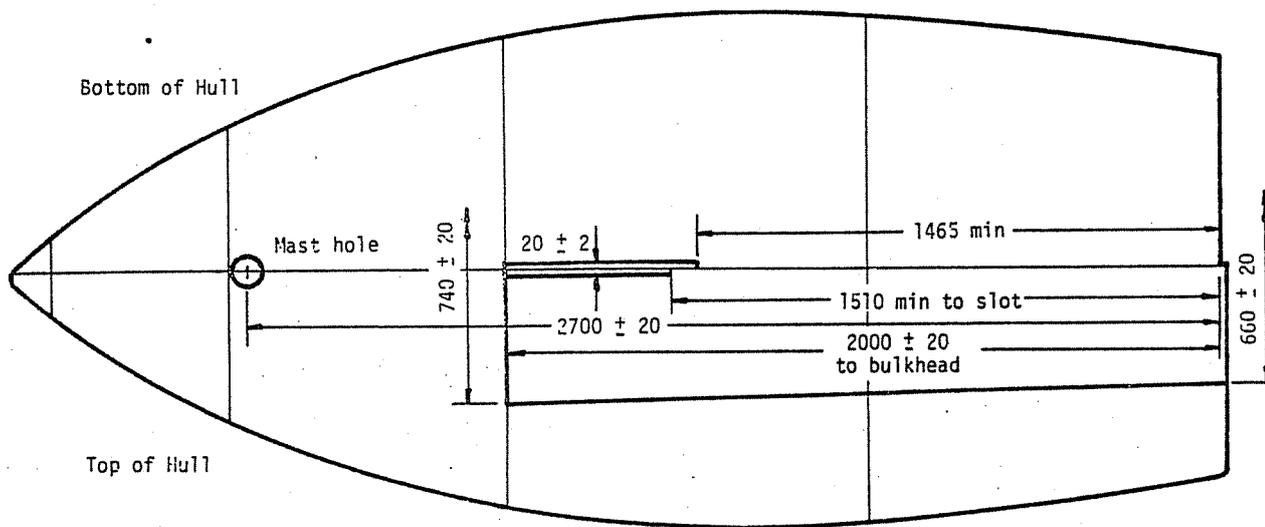
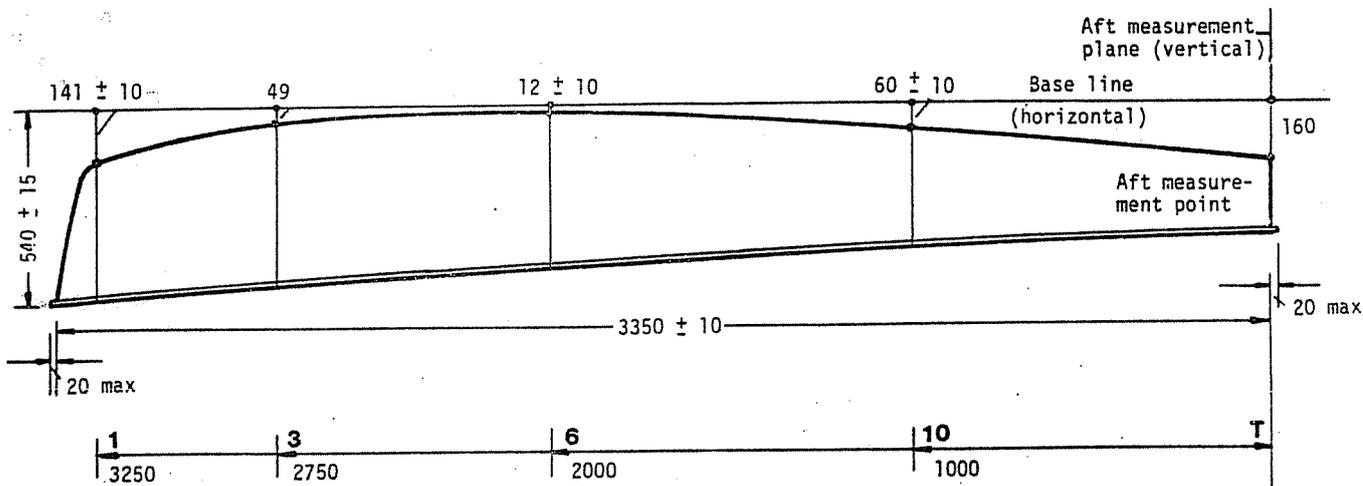
15. FITTINGS AND RIGGING

- (1) The halliard, sheeting arrangements and fittings are not controlled.
- (2) A fitting for fastening a painter at the stem shall be provided.

16. EQUIPMENT

- (1) The following equipment shall be on board while racing:
 - (i) A life jacket.
 - (ii) A bailer, if the boat has no self-bailer.
 - (iii) A paddle, minimum 800 mm long.
 - (iv) A painter of diameter not less than 6 mm and not less than 7 m in length, unless otherwise prescribed in the racing instructions.
- (2) I.Y.R.U. Racing Rule 22.3 (a) shall not apply. The total weight of clothing and equipment worn, or carried by a competitor, including buoyancy garments, shall not be capable of exceeding 15 kg when saturated with water.

To test this, all clothing and other equipment worn or carried by the competitor shall be thoroughly soaked by submerging in water and shall then be suspended to permit ready draining and allowed to drain for one minute, at the end of which period the weight shall be recorded.



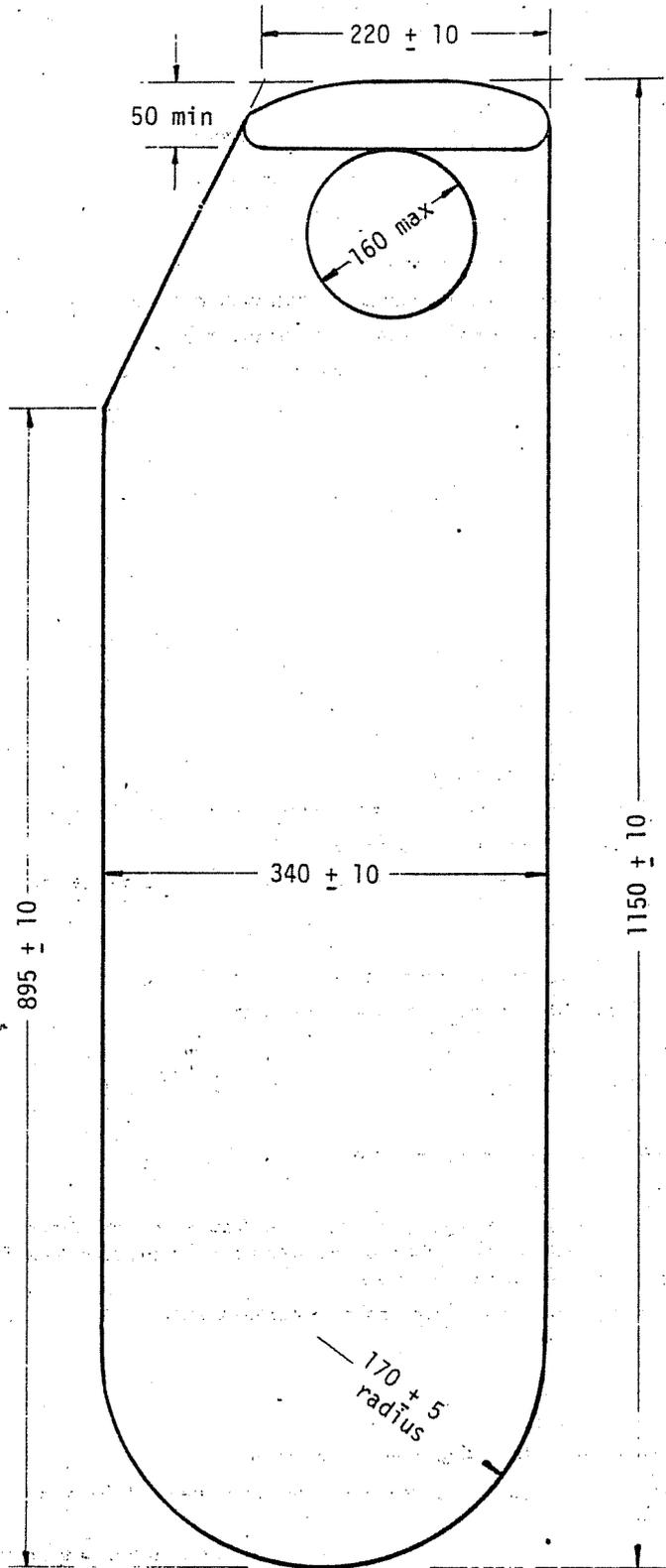
The stem template shall be set with its 'nibs' touching the hull and with its aft edge forward or aft of station 1 by a distance equal to the difference in hull length from the mean length (3350mm) taking account of sign (i.e. + or -).

Example:

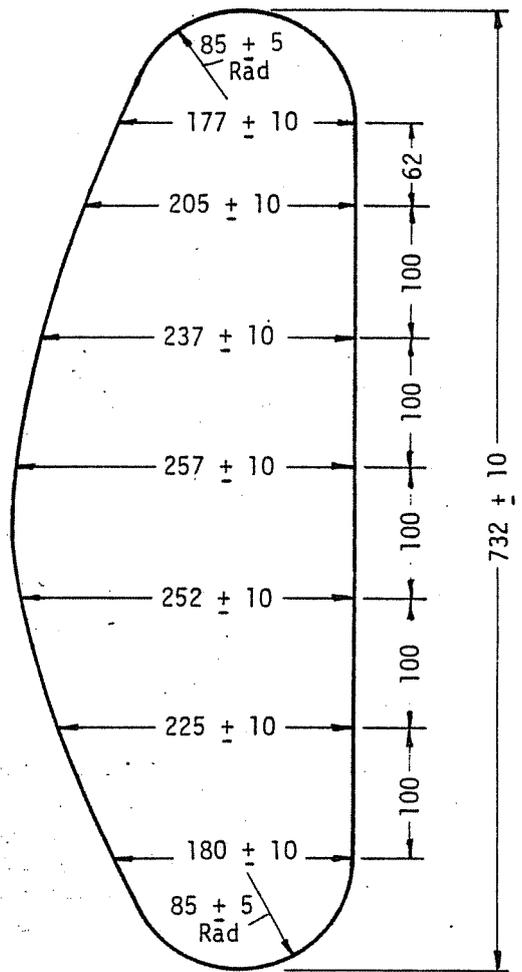
overall length 3343
 - 3350

Aft edge aft of station 1 2mm

MEASUREMENT DIAGRAM

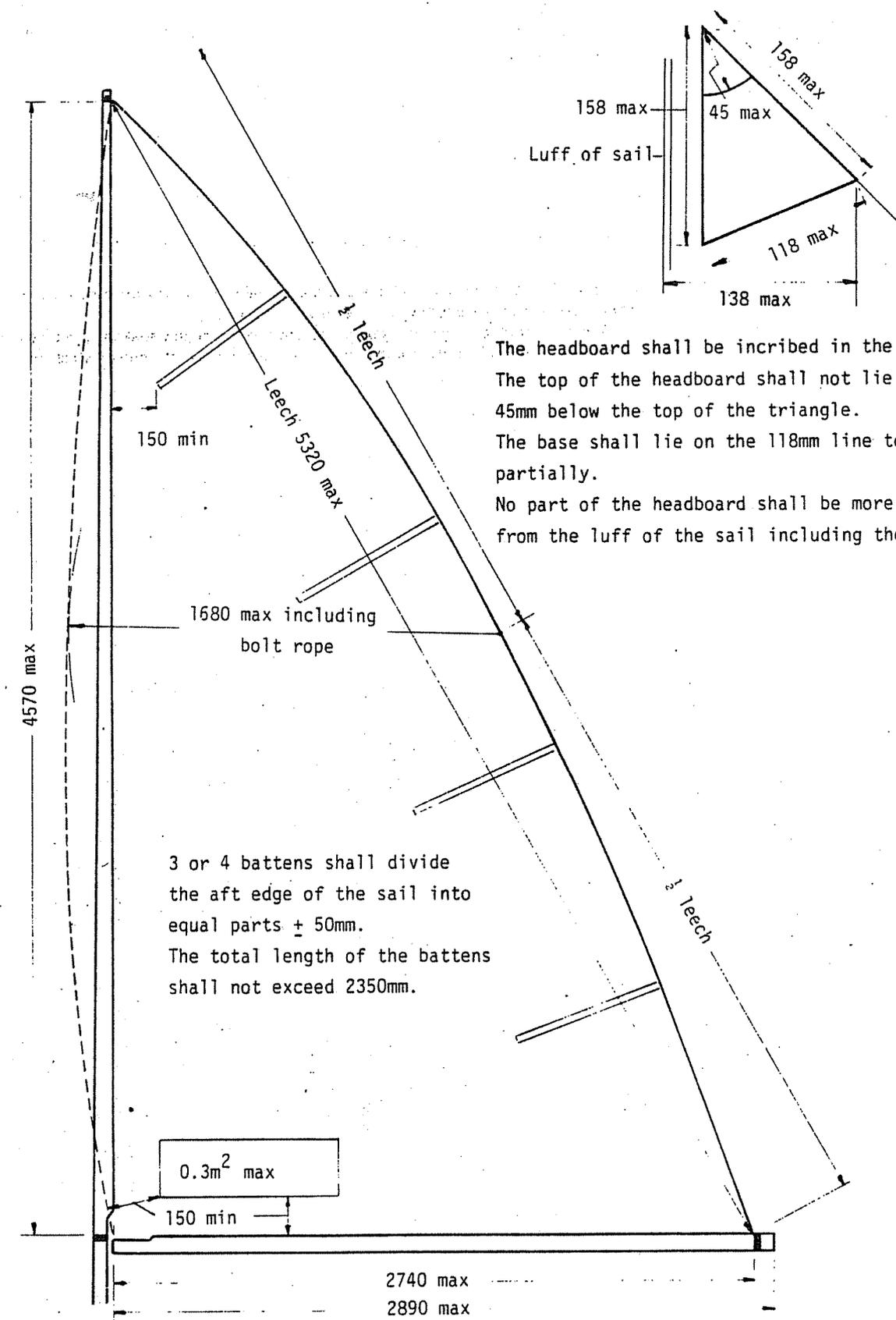


CENTREBOARD



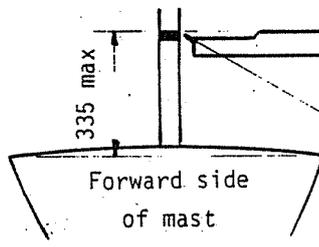
RUDDER BLADE

HEADBOARD

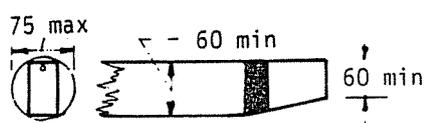


The headboard shall be incised in the triangle. The top of the headboard shall not lie more than 45mm below the top of the triangle. The base shall lie on the 118mm line totally or partially. No part of the headboard shall be more than 138mm from the luff of the sail including the bolt rope.

3 or 4 battens shall divide the aft edge of the sail into equal parts ± 50 mm. The total length of the battens shall not exceed 2350mm.



The upper edge of forward end of the boom shall not be lower than the top of the lower band on the mast.



Metal booms shall not be tapered.