INTERNATIONAL H-BOAT CLASS RULES

The following amendments to the Class Rules have been approved to be effective 1st March 2007.

1. GENERAL PRINCIPLES

1.1 One-Design

The H-Boat is a one-design class.

Except where variations are specifically permitted, boats of this class shall be alike in: hull, deck and keel form, construction, weight and weight distribution; shape of rudder and sails.

All boats shall be built in accordance with these class rules and the plans. Deviations from the plans are permitted for spars, standing and running rigging, sheeting arrangements, rudder stock bearings, tiller and tiller extension, lifting eyes, fittings on deck, details of hatches and certain parts of the accommodation. These items shall comply with the rules.

All boats, in respect of hull, deck, keel and rudder form and construction and spars, shall comply with either the current class rules, or the corresponding rules applying to them at the time the first measurement certificate was issued. Any alterations or replacements shall comply with the rules current at the time the alterations or replacements are made.

Sails shall comply with the current rules.

Interpretations of these rules shall be made by the ISAF which in coming to its decision may consult the International H-Boat Class Association and the original plans.

1.2 These rules are complementary to, and shall be read in conjunction with, the plans measurement form and measurement diagram.

1.3 In the event of discrepancy between these rules, the measurement form and/or the plans, the matter shall be referred to the ISAF.

1.4 Administering Authority

1.4.1 The international authority for the class shall be the ISAF which shall co-operate with the International H-Boat Association in all matters regarding these rules.

1.4.2 In countries where there is no National Authority or the National Authority does not wish to administer the class, its functions as stated in these rules shall be carried out by the International H-Boat Association or its delegated representative (National H-Boat Association).

1.5 Neither the ISAF nor the International H-Boat Association accept any legal responsibility in respect of these rules and/or the plans, or any claims arising therefrom.

2. ADMINISTRATION

2.1 English Language

2.1.1 The official language of the class is English and in the event of dispute over interpretation the English text shall prevail.

2.1.2 The word "shall" is mandatory and the word "may" is permissive.

2.2 Licensed Builders

The H-Boat shall be built only by builders licensed to do so by the ISAF. Applications for licences shall be made to the International Yacht Racing Union which may issue a licence to a builder considered to have appropriate production facilities, knowledge and experience and to be able to fulfil such other conditions as the ISAF may deem necessary. A licensed builder shall be required to bind himself to comply with the class rules, plans, specifications and measurements.

2.3 International class FEE

An International Class Fee (ICF) shall be paid by the builder to the ISAF for each boat built. As evidence of payment of the International Class Fee the ISAF shall issue an official plaque.

2.4 Registration and Measurement Certificate

2.4.1 No boat is permitted to race unless it has an valid measurement certificate.

2.4.2 ISAF Plaque. The ISAF Plaque shall be obtained by the builder before the boat leaves his yard. The plaque will carry an ISAF serial number. The builder shall insert on the plaque the builder's name, serial number of plug and mould. The plaque shall be fixed to the hull in an permanent manner in the position indicated in rule 2.7.1 (see also plan no. A.3.4)

2.4.3 The certificate is obtained as follows: The owner applies to his National Authority for a sail number giving the ISAF Plaque number and the builder's name. The National Authority shall issue a sail number only on receipt of these details as evidence that ICF has been paid. Each country shall start its numbering from "one", and each number shall be used once only. The boat shall be measured by an official measurer recognised by the National Authority of the country in which measurement takes place. The completed measurement form shall be supplied to the owner of the boat. The owner shall send the completed measurement form to his National Authority together with any registration fee that the National Authority requires. On receipt of this the National Authority may issue a Measurement Certificate to the owner.

2.4.4 Change of ownership invalidates the Measurement Certificate but shall not necessitate remeasurement. The owner may apply to his National Authority for a new certificate, returning the old certificate with any re-registration fee that may be required and stating the necessary particulars.

The National Authority may then issue a certificate to the new owner.

2.4.5 It is the owner's responsibility to ensure that his boat, spars, sails and equipment comply with the class rules at all times.

2.4.6 Changes and major repairs to the boat, its spars, or equipment invalidate the certificate and require partial remeasurement as the official measurer may determine.

2.4.7 Notwithstanding anything in these rules the ISAF or the National Authority shall have the power to withdraw or to refuse to grant a certificate to any boat.

2.5 Measurement

2.5.1 Only a measurer officially recognised by the builder's or the owner's National Authority shall measure a boat, its spars, sails and equipment and sign the declaration on the measurement form.

2.5.2 Tolerances are given in these rules and corresponding drawings to permit minor building errors or distortion through age.

2.5.3 The measurer may take supplementary measurements in order to satisfy himself that the boat is in accordance with the class rules. If the measurer considers that there is a departure from the one design construction or these rules in any detail the National Authority shall be informed. In such a case the National Authority shall not issue a Measurement Certificate until the case has been investigated and any necessary corrections have been made.

2.5.4 All boats shall be measured using the official templates supplied by the ISAF.

2.5.5 New or substantially altered sails shall be measured by an official measurer who shall stamp affix a licensed button or sign and date the sails near the tack.

2.5.6 A measurer shall not measure a boat, its spars or equipment owned or built by himself, or in which he is an interested party or has a vested interest. Sails may be measured by sailmakers licensed by their National Authority.

2.6 ISAF Measurement Instructions

Except where other methods of measurement are specifically indicated all measurements shall be carried out in accordance with the ISAF Measurement Instructions.

2.7 Identification Marks

2.7.1 The ISAF plaque shall be permanently fixed to the bulkhead at the forward end of the starboard side cockpit locker so that it can be clearly seen through the cockpit hatch.

2.7.2 Sail numbers shall be carried on the mainsail and spinnaker in accordance with rule 3.6.1.3.

3. CONSTRUCTION AND MEASUREMENT RULES

3.1 Moulds

A master mould owned by the Finnish Yachting Association is available for obtaining plugs. This master mould shall be used unless permission not so to do has been given by ISAF.

In such a case a plug shall be made which shall be within tolerances which are one half of those for a completed boat and it shall be approved by the ISAF Chief Measurer before manufacture of moulds is commenced.

Before production is started at the builder's premises the production moulds shall be checked and approved by an official measurer recognised by the builder's National Authority.

3.2 Hull

3.2.1 The hull, including the deck, cabin, cockpit, hatches and inner hull moulding shall, unless otherwise stated, be for glass reinforced plastic (grp) and shall be built according to the plans and the laminate specification in Appendix 1.

3.2.2 The deck moulding without fittings or hatches shall not weigh less than 180kg. It shall be laminated to be of uniform thickness.

3.2.3 Hull measurements shall be taken in accordance with, and shall be within the limits shown on the measurement diagram and the measurement form.

3.2.4 Amendment: change the current rule as follows:
The accommodation shown on the plan is the minimum that is required. Two shelves above the aft berths, galley and locker, hatches in the cabin sole are compulsory.

Material for the accomodation would be free and the fiddles around the berths are not compulsory.
Additional accommodation may be installed but the centre of gravity of the complete hull shall not be lowered as a result of this.

The design and location of the galley and locker may be changed subject to prior written approval being obtained from ISAF.

A full bulkhead with a hatch or a semi-bulkhead may be fitted forward of station 9.5. The minimum thickness shall be 6mm for plywood or 4mm for GRP.

3.2.5 The forecastle hatch and a cabin companionway hatch, hatches in the cockpit seats and a hatch for the aft stowage space are compulsory.

3.2.6 A well for an outboard motor may be fitted in the aft stowage space.

3.2.7 Lifting eyes may be permanently fastened to two keel bolts. The total weight of the eyes shall not exceed 4kg.

3.3 Keel

3.3.1 The keel shall be of cast iron.

3.3.2 The keel may be galvanised and/or covered with any synthetic material.

3.3.3 The weight of the keel shall be 725kg +/- 10kg including any coating.

3.3.4 The keel shall be fastened to the hull by seven 16mm diameter stainless steel or galvanised steel bolts.

3.3.5 The shape of the keel including any coating shall be controlled using the official templates.

3.3.6 The aft end of the keel shall have a square edge. The minimum width shall be 5mm, the maximum 8mm (see plan A1.3).

3.4 Rudder

3.4.1 The rudder shall be of grp and constructed in accordance with the plans and the specification.

3.4.2 The rudder stock shall be of 25mm diameter solid stainless steel.

3.4.3 A bearing of phenolic laminate (such as Tufnol) or equivalent material shall be fitted to the rudder stock trunk at deck level.

3.4.4 A bearing of bronze or of stainless steel shall be fitted to the lower part of the skeg.

3.4.5 The rudder stock shall be in the position indicated on the measurement diagram and shall be vertical.

3.4.6 The tiller and tiller extension are not controlled by these rules.

3.4.7 The aft end of the rudder shall have a square edge. The minimum width shall be 4mm (see plan A3.3).

3.5 Spars

3.5.1 Materials
The mast, boom and spinnaker boom shall be of aluminium alloy containing not less than 90% aluminium.

3.5.2 Mast and Standing Rigging

3.5.2.1 The mast shall be stepped on the cabin top on the centreline of the boat.

3.5.2.2 The forward face of the mast shall be 843mm +/- 40mm aft of station 8.

3.5.2.3 Two easily discernible marks, each not less than 50mm x 20mm, shall be painted on the deck so that the forward edge of the aft marks and the aft and the aft edge of the forward mark indicate the permitted limits for the location of the forward face of the mast.

3.5.2.4 The mast shall be an aluminium alloy extrusion. The section shall have the following dimensions:

fore and aft 125mm +/- 10mm including the groove for the luff rope
athwartships 90mm +/- 10mm

The radius of the leading edge shall not be less than 20mm and the point of maximum width of the section shall not be less than 40mm from the forward or aft edge of the mast.

The wall thickness of the extrusion shall not be less than 1.5mm nor more than 5,0 mm.

3.5.2.5 The weight of the plain extrusion shall not be less than 2.20kg/m.

3.5.2.6 The mast shall be straight and of constant section except as permitted below:

Above the attachment point of the forestay the mast may be tapered in accordance with the plan; The luff groove may be cut away to provide entry for the mainsail bolt rope; The mast may be reinforced with an internal sleeve below measurement band number 1.

A permanent set, due to distortion not exceeding 50mm between the upper and lower measurement bands shall be permitted.

3.5.2.7 Measurement bands, not less than 10mm wide, which shall be clearly discernible while racing shall be painted or otherwise permanently marked on the mast as follows:
No 1 With its upper edge 550mm +/- 5mm above the reference surface on the cabin top.
No 2 With its lower edge not less than 7040mm and not more than 7050mm above the upper edge of band No 1.
No 3 With its lower edge 8700mm maximum above the upper edge of band No 1.

3.5.2.8 The standing rigging shall consist of:
upper (main) shrouds, lower shrouds, forestay and backstay
They shall be made of stainless steel of circular cross-section.

3.5.2.9 The diameter of the backstay shall be 3mm minimum. The diameter of the other standing rigging shall be 4mm minimum.

The length of the backstay wire is a minimum of 9500 mm including terminals.

3.5.2.10 The attachment point on the mast of the upper shrouds shall not be more than 100mm from the lower edge of band No 2.
Note: For the purpose of this and subsequent rules the "attachment point" is defined as the intersection of the centreline of the wire and the surface of the mast or deck. Shrouds and forestay shall be fastened to tangs or other external fixings or by 'key hole' fittings.

3.5.2.11 The attachment point on the mast of the lower shrouds shall be not less than 3320mm and not more than 3620mm above the upper edge of band No 1.

3.5.2.12 The attachment point of the forestay on the mast shall not be above the lower edge of band No 2 nor more than 100mm below it.

3.5.2.13 The backstay shall be attached to the mast as indicated on the plan. A backstay tensioning system is permitted.

3.5.2.14 The forestay shall intersect the deck 1580mm +/- 5mm forward of station 8. If the jib is attached to furling gear this measurement shall be taken to the line of the forward edge of the jib in its most forward position.

3.5.2.15 The main and lower shrouds shall intersect the deck not more than 75mm inboard from the sheerline. The attachment points shall each be not more than 3250mm nor less than 2850mm from the intersection of the centreline of the forestay with the deck, measured radially.

3.5.2.16 The bearing surface of the sheave for the spinnaker halyard shall not be more than 100mm above the lower edge of band No 2.
The spinnaker halyard shall not be supported more than 60mm forward of the forward face of the mast.

3.5.2.17 Spreaders as shown on the plan shall be fitted. The spreaders shall be not less than 700mm long measured from the face of the mast to the bearing surface of the shroud. The centreline of the attachment point of the spreaders shall be above and not more than 200mm from the attachment point of the lower shrouds.

3.5.2.18 A stop shall be fitted to the mast to prevent the line of upper edge of the boom from being below band No 1.

3.5.2.19 The mast complete with all standing and running rigging and supported at band No 1 shall not weigh less than 12kg when it is weighed at band No 3. For the purpose of this measurement the halyards shall be fully hoisted and the standing rigging secured along the mast. The ends of the rigging below band No 1 may rest on the ground.

3.5.3 Boom

3.5.3.1 The main boom shall be an aluminium extrusion of continuous section and shall have a continuous groove for a boltrope. The dimensions shall be: depth 90mm +/- 15mm and width 75mm +/- 15mm. The weight of the extrusion shall not be less than 1.25kg/m. Tapered or permanently bent booms are prohibited. However, a set due to distortion not exceeding 30mm between inner edge of the measurement band and the inner end of the boom is permitted.

3.5.3.2 A measurement band, clearly discernible while racing, shall be painted or otherwise permanently marked on the boom with its inner edge not more than 3000mm from the mast measured with the boom in its lowest position and perpendicular to the mast. The measurement shall be taken from the line of the aft edge of the mast (shown on the diagram of the mast section) projected downwards excluding any local curvature due to the sail entry.

3.5.4 Spinnaker Boom

When attached to the mast the outer end of the spinnaker boom shall not be capable of extending more than 2415mm from the face of the mast. It shall be attached to the mast 950mm +/- 30mm above band No1.

3.6 Sails

3.6.1 General

3.6.1.1 The sails shall be made and measured in accordance with Section G of the ISAF Equipment Rules 1997 - 2000, except where otherwise specified.
When a term used in the class rules is the same, or in similar words, as one defined in the Equipment Rules of Sailing 1997 - 2000 the ERS definition shall be used.

3.6.1.2 The sails shall be made of synthetic woven material. The cloth weight of the mainsail and jib shall not be less than 200g/m², and of the spinnaker not less than 35g/m². Unwoven transparent panels with total area not exceeding 0.3m² are permitted both in mainsail and jib. No transparent panel shall be less than 150mm from any edge of the sail.

3.6.1.3 The class emblem, national letter(s) and the yacht's sail number shall appear on both sides of the mainsail. National letter(s) and sail-number(s) shall be on both sides of the spinnaker, touching a horizontal centreline created by folding the spinnaker in half horizontally at the half height of the leeches and at the half of the vertical centre fold.

Letters and numbers shall be of the following minimum dimensions:
Height 380mm
Width (excluding number one and letter I) 250mm
Thickness 55mm
Space between adjacent letters and numbers 75mm
The class emblem shall be of a colour clearly discernible and contrasting with the sail or be of two colours in accordance with the plan and shall be of the following minimum dimensions:
Height 300mm
Width 440mm overall
Thickness 50mm

3.6.1.4 Each sail measured after 1st of January 2001 shall have permanently fixed near its tack an official red IHA button. No sail shall accepted for its first measurement without this button. The measurer shall sign next to the button. The button shall be available from the IHA.

3.6.2 Mainsail

3.6.2.1 The mainsail shall not extend above the lower edge of band No 3 nor beyond the inner edge of the band on the boom. The upper edge of the boom shall not be below the upper edge of band No 1.

3.6.2.2 The length of the leech shall not exceed 9190mm.
As an exception to the interpretation under 3.6.11 above the mainsail leech length shall
be taken as in the diagram and not in accordance with the ERS 1997-2000. That is the
length shall be taken between the **aft head point** to the **clew point**.

3.6.2.3 The total width of the mainsail (including the luff rope) between points on

the luff and leech at half and three quarter heights shall not exceed 1910mm and 1110mm respectively. Any hollow in the leech shall be bridged.

The half leech height shall be taken as the **half leech point**.
The three-quarter leech height shall be taken as the **three-quarter leech point**.
The half luff height shall be taken as the point on the **luff** found by folding the **head point** to the **tack point**.
The three quarter luff point shall be taken as the point found by folding the **head point** to the point to be used as half luff height.

3.6.2.4 The horizontal and vertical measurements of the headboard shall not exceed 120mm.

3.6.2.5 The total width of the mainsail (including the luff rope) measured at right angles to the luff 400mm from the head shall not exceed 320mm.

3.6.2.6 Not more than four battens are permitted in the mainsail. The batten pockets shall divide the leech into equal parts +/- 100mm, measured to the lower edge of each pocket. The length of the lower three pockets shall not exceed 850mm measured from the aft edge of the sail. The upper batten pocket may extend to the mast.
The inside width of the pockets, excluding local widening for the purpose of inserting the battens, shall not exceed 60mm.

The **leech** parts shall be taken as:
The distance from the **clew point** to the intersection of the **leech** and the centreline of
the lower **batten pocket**.
The distance between the intersections of the centrelines of two adjacent **batten**
pockets and the **leech**.
The distance from the **aft head point** to the intersection of the **leech** and the centreline
of the upper **batten pocket**.

3.6.2.7 Reefing gear, Cunningham and other tensioning devices are optional.

3.6.3 Jib

The jib shall be made and measured in accordance with the ISAF Sail Measurement Rules 1993 except where varied herein. Where a term or a measurement given in the ISAF Sail Measurement Rules is used, it is printed in *'italic'* type.

“ISAF Sail Measurement Rules 1993” shall be taken as the “IYRU Sail Measurement
Rules 1993”.
As no terms in the class rules are printed in italic type, the IYRU Sail Measurement
Rules 1993 definitions shall be used when a term used in the class rules is the same,

or in similar words, as one defined in the IYRU SMR 1993.

3.6.3.1 Construction

The construction shall be: Soft sail, single ply sail.
The sail shall have 3 batten pockets in the leech.
The following are permitted: Stitching, glues, tapes, bolt ropes, corner eyes, hanks, batten pockets elastic, batten pocket end caps, leech line with cleat, two windows, sailmaker label, royalty label, sail button, tell tails.

3.6.3.2 Dimensions

	maximum
Luff length	7580mm
	7130mm
Leech length	2830mm
	7445mm
Foot length	45mm
	40mm
Foot median	7580mm
	7360mm
Top width	935mm
Foot irregularity	1870mm
Head Point to point on foot 750mm from Tack Point	380mm
	1140mm
Head Point to point on foot 750mm from Clew Point	115mm
	200mm
Upper width between points on luff and leech respectively 2450mm and 2300mm from the Head Point	300mm
	350mm
	450mm
Lower width between points on luff and leech respectively 5020mm and 4720mm from the Head Point	
Primary reinforcement from corner measurement points	
Secondary reinforcement from corner measurement points for flutter patches	
for batten pocket patches	
Top batten pocket inside length	
Middle batten pocket inside length	
Bottom batten pocket inside length	

The **leech length** shall be taken as in IYRU Sail Measurement Rules 1993, that is from

the **head point** to the **clew point**, and not as shown in the diagram.
Aft “Head Point to Point on Foot”
In the diagram the point on the foot shall be 750mm from a point on the foot below the
clew cringle while in the CR text the point shall be 750mm from the clew point. The CR
text shall be taken to be correct.

3.6.3.3 The top of the jib shall be straight at an angle of 90° to the luff.

The sail shall be taken to comply with this rule if the top is approximately straight and at
approximately 90° to the **luff**.

3.6.3.4 Jib furling gear is optional and can be installed with its mechanism below or above the deck. When installed below deck the forestay shall have a sealed radial bearing system at the intersection point of the deck. If a tube is used on the forestay it shall be enclosed in the luff of the sail.

3.6.4 Spinnaker

3.6.4.1 The spinnaker shall be a three cornered sail symmetrical about its centreline. It shall not embody any device capable of altering its shape.

The sail shall be taken to be symmetrical about its centreline if, when folded in half, the
halves look to be approximately of the same shape.
These interpretations should be superseded by class rules amendments as soon as
possible.

3.6.4.2 The lengths of the luffs shall not exceed 7300mm. The half width of the foot shall not exceed 2400mm. The half width measured between points on the luffs and the centrefold 3500mm from the head shall be 2650 +/- 50mm. The total distance from the head to the centre of the foot shall not exceed 9000mm. This measurement shall be taken with the sail opened out, laid on a flat surface and with sufficient tension applied at the head and the centre of the foot just to remove the wrinkles across the line of the measurement.

3.7 Weight of Boat

3.7.1 The total weight of the boat shall not be less than 1450kg. Corrector weights, if any of lead shall be laminated to the lower surface of the deck, evenly divided, at stations two and eight.

3.7.2 The following parts and equipment shall be include in the total weight:

Keel, rudder, tiller and tiller extension,
minimum accommodation according to the plan
mast and standing rigging, all halyards
and the spinnaker boom guys,
main boom (without mainsheet, kicking strap
and other loose equipment),
all hatches and fixed fittings including
fairleads and tracks with sliders,
winches and cleats.

3.7.3 The following equipment shall not be included in the weight:
all non-fixed equipment such as spinnaker
pole, life vests, anchor and anchor line,
paddle, bucket, pump etc., all blocks,
sheets and lines for trimming of sails,
mattresses and personal effects.

3.7.4 The following parts shall, if they are permanently fixed to the boat, either be removed before weighing or their weight shall be estimated and deducted:
compasses,
fixed pumps with hoses,
tightening devices for backstay
and kicking strap, jib furling
gear, stove, toilet, lifting eyes.
A list of estimated weights shall be included in the measurement certificate.

3.8 General and Prohibitions

3.8.1 Loose Ballast

Loose ballast or ballast carried by the crew is prohibited.

3.8.2 Rigging Adjustment

3.8.2.1 The position of the attachment points of shrouds and stays shall not be adjustable.

3.8.2.2 The length of shrouds and stays shall be altered only by turnbuckles, which shall be above the deck.
It is permitted to adjust these while racing.

3.8.2.3 Sail trimming devices, except the jib luff adjustment (Cunningham) and the backstay, shall not pass through holes in the deck.

3.8.3 Mast Adjustment

The position of the foot of the mast shall not be altered while racing.

3.8.4 Support for crew

When hiking the crew may use only handles and/or footstraps.
All footstraps shall be designed so as to come completely off the feet in the normal act of tacking.
Footstraps shall be open and capable of accommodating both feet at one time.
Handholds of any type are permitted on the deck and cabin only.

3.8.5 Electronic Equipment

Devices transmitting and correlating data relative to wind direction or speed or boat speed and location by means such us, but not limited to electronic, mechanical, hydraulic or pneumatic are prohibited from use whilst racing. Any boats fitted with this type of equipment shall have the display and the master units disabled to the satisfaction of the race committee.

The use of an electronic digital compass with chronograph (timer and/or clock) is permitted. The compass must be entirely self-contained with either an internal battery or solar power. The compass shall have no external connections. This includes power supply and data inputs.

3.8.6 Advertising

For advertising on the H-Boat Category C is valid with following restrictions: Advertising on the jib is prohibited. Advertising on the main is allowed in an area between the boom and a line parallel to the boom in a distances of 1800 mm.

3.8.7 A competitor's clothing and equipment shall not weigh more than 10kg, excluding clothing (including footwear) worn only below the knee.

4. ADDITIONAL RULES APPLICABLE WHILE RACING

4.1 Unless otherwise specified in the notice of race there shall be at least two and not more than four persons on board. The crew shall consist of the same number of persons during an event of less than 7 consecutive days. In a World Championships the total weight of the crew in underwear shall be a maximum of 300 kg.

4.2 The following equipment shall be carried on board:
anchor of minimum weight 7kg,
30 metres of 12mm minimum diameter synthetic fibre rope,
one paddle,
one bucket,
personal buoyancy for each member of the crew.

4.3 An outboard motor may be carried on board while racing.

OFFICIAL PLANS

A.1.1	Lines drawing	A.1.2	Sectional drawing
A.1.3	Keel	A.2.1	General arrangement
A.3.1	Lamination drawing	A.3.2	Spars
A.3.3	Rudder	A.3.4	Details
A.3.5	Alternative main bulkhead		
A.4.1	Sail Plan	A.5.1	Measurement Plan

APPENDIX 1 - LAMINATE SPECIFICATION

1. HULL (SEE ALSO PLAN 3.1)

1.1 Gelcoat.

1.2 300g/m² surface mat over whole moulding.

1.3 2 x 450g/m² CSM (chopped strand mat), over whole moulding.

1.4 680g/m² WR (woven roving), over whole moulding.

1.5 450g/m² CSM, over whole moulding.

1.6 680g/m² WR, over whole moulding. 1200mm below the sheerline there shall be a 150mm wide overlapping joint.

1.7 450g/m² CSM below the joint.

1.8 680g/m² WR below the joint.

1.9 450g/m² CSM over the keel 400-500mm wide according to plan.

1.10 680g/m² WR as 1.9 above.

1.11 450g/m² CSM as 1.9 above.
One 100mm wide strip of 450g/m² CSM shall be laid between floors or bulkheads and the hull.

1.12 The layers shall be in the above given sequence. No layers shall be omitted nor their weight reduced.

1.13 The pocket formed by the skeg and rudder may be filled with plastic or equivalent material.

1.14 Visible inner surfaces to be painted.

1.15 For assembling of the berths to the hull a support can be used which is laminated to the hull. This support shall consist of one fibre-glass matt 450g/m² and shall have a maximum extension of 70 x 70mm alongside of the hull.

2. FLOORS

2.1 5 x 450g/m² CSM. Construction according to plan. Flange 30mm wide.

3. DECK

3.1 Gelcoat.

3.2 300g/m² surface mat over whole moulding.

3.3 450g/m² CSM over whole moulding.

3.4 680g/m² WR over whole moulding.

3.5 450g/m² CSM over whole moulding.

3.6 15mm Airex or equivalent material as indicated on plan.

3.7 450g/m² CSM over whole moulding.

3.8 680g/m² WR over whole moulding.

3.9 450g/m² CSM over whole moulding.

3.10 Deck beams to be covered with 3 x 450g/m² mat with 50mm overlap on both sides of beam.

3.11 Sandwich construction may be substituted by a construction with deck beams in accordance with the plan and paragraph 3.10.

3.12 Visible inner surfaces are to be painted.

4. ACCOMMODATION MOULDING

4.1 Gelcoat.

4.2 4 x 450g/m² CSM over whole moulding.

4.3 2 x 450g/m² over the section which forms a bulkhead.

5. FORWARD ACCOMMODATION MOULDING

5.1 Gelcoat.

5.2 4 x 450g/m² CSM over whole moulding.

6. AFT MOULDING AND BULKHEAD

6.1 Gelcoat.

6.2 3 x 450g/m² CSM over whole moulding.

6.3 2 x 450g/m² CSM over bulkhead.

6.4 Bulkhead may be made of marine plywood.

7. JOINING OF PARTS

7.1 Plywood bulkheads attached to hull with 3 x 450g/m² mat on both sides.

7.2 GRP bulkheads as in paragraph 7.1

7.3 Accommodation mouldings attached to hull with 2 x 450g/m² mat.

7.4 Deck to hull joint to be according to detail on plan.

7.5 Attachment of floors to hull to be as in paragraph 7.1 above.

8. HATCHES

8.1 Gelcoat (can be omitted).

8.2 300g/m² surface mat.

8.3 5 x 450g/m² CSM.

9. RUDDER

9.1 Gelcoat.

9.2 4 x 450g/m² CSM on both halves.

9.3 To be filled with Airex or equivalent material.

10. MATERIALS

Glassfibre of E-type glass. Resin shall be polyester suitable for marine use. All fillers are prohibited.