

**THE CLASS RULES OF  
THE INTERNATIONAL 12 SQUARE METRE  
ONE DESIGN SHARPIE**



# THE CLASS RULES OF THE INTERNATIONAL 12 SQUARE METRE ONE DESIGN SHARPIE

The official language of the Sharpie Class is English. In case of any dispute over translation the English text shall prevail. The word 'shall' is mandatory and the word 'may' is permissive.

The Sharpie Class is administered by the 'International Meeting', which consists of the nominated representatives of the National Class Associations (NCAs). The International Meeting shall be held annually during the European Championship.

The Sharpie Class rules are Open Rules. Any proposal for changes in the class rules must be agreed at the International Meeting by a majority of the countries present. Each country has one vote. An agreed change in the class rules shall become effective on 1 January of the following year. Proposals for changes in the class rules shall be circulated to the national Associations by 1 April for consideration by National associations prior to the International Meeting of that year.

## **Compliance with Class Rules**

A boat ceases to comply with the class rules when:

- equipment is used which does not comply with the class rules;
- changes are made which cause the boat to no longer comply with limitations recorded on the certificate.
- alteration or repair render any part of the boat outwith the measurements specified in the class drawings and/or measurement form.

All rules must be read in accordance with the relevant ISAF Equipment Rules of Sailing.

The International 12 Square Metre Sharpie has been designed as a fast racing two-man centre boarder which is also suitable for day cruising. It has shallow draught and a gunter rig which is easily reefed and capable of standing reasonably heavy weather. Apart from toe straps, sitting out aids are not permitted.

## SPECIFICATION

### 1. GENERAL

**1.1** The boats and all their constructional details must be carefully built using mahogany on oak keel and frames. They should comply strictly with the drawings and specifications mentioned below. All dimensions given for the constructional parts are the minimum scantlings and must not be reduced. When a certificate has been issued it is the responsibility of the owner to maintain the boat within the letter and spirit of the rules.

**1.2** Where the specification, rules or drawings prescribe the timber any other timber or marine ply of similar density may be used. The hull, before first launching, and at any subsequent time, being dry to the satisfaction of the measurer, shall weigh not less than 230kg stripped of floor boards and all movable gear. If required compensating weights must be fitted in the form of four equal strips of lead or other metal over the whole height of frames 2 and 8. These must be fastened permanently.

**1.3** Where this specification, rules or drawings prescribe the metal, any other metal of similar strength and density may be used. Details concerning weight given in other parts of these rules remain valid.

**1.4** Where this specification prescribes rivets, bolts or nails, alternative fastenings such as nut-bolts or woodscrews may be used. Additionally, glue may be used between wood surfaces.

**1.5** The following drawings belong to the specifications:

#### Drawing

No.	Description
1	Fore-body frames and stem, <i>scale 1:1</i>
2	After-body frames, <i>scale 1:1</i> , rudder blade and centreboard, <i>scale 1:5</i>
3	Table of offsets
4	Building and accommodation plan, <i>scale 1:10</i>
5	Sailplan, <i>scale 1:20</i>
6	Spars plan, <i>scale 1:10 and 1:1</i>
7	Rigging plan
8/8a	Spar fittings, <i>scale 1:1</i>
9	Rudder fittings, <i>scale 1:1</i>
10	Miscellaneous fittings, <i>scale 1:1</i>
11	Centreboard case

### 2. PRINCIPAL DIMENSIONS

Length overall	5990mm
Length on water line (approx.)	5400mm
Maximum beam	1430mm
Depth	530mm
Draught with centreboard up	160mm
Draught with centreboard down	960mm

### **3. KEEL AND STEM**

**3.1** Keel: continuous oak 35mm thick shaped as in Drawing Nos 1,2. Rebate for skin planking 15mm.

**3.2** Stem: oak, 50mm outside and 60mm inside stem respectively. At the fore-edge of the stem, which tapers to about 15mm, a rounded metal band about 10 × 5mm is to be fitted. Stem-band is to join up with a stem cover-plate which is to be fitted with an eye for the painter. Both keel to stem and outside to inside stem are to be fastened with 8mm metal nut-bolts as in Drawing No. 4.

### **4. TRANSOM**

**4.1** Timber is to be 20mm thick and fastened to the keel with a central transom knee of oak, 40mm thick as indicated on Drawing No. 4, using 5mm rivets. On the forward face of the transom, a timber transom frame 20mm thick is to be fixed to the transom with flat-head screws 35 × 4.5mm.

### **5. CENTREBOARD CASE AND CENTREBOARD**

**5.1** Centreboard case to be of timber, lower part 30mm, upper part 18mm. Side-planks connected by 2.8mm square rivets spaced at 75mm. Forward and aft filling pieces of centreboard case 45 × 20mm timber. Side walls joined through forward and aft pieces with 2.8mm square rivets, spaced at 60mm. At half the length of the centreboard case a lateral stiffening timber 50 × 20mm at the lower end, 40 × 20mm at the upper end, joined to the centreboard case with 2.8mm square rivets, spaced at 100mm. Centreboard case to be joined to the keel with 70 × 7mm wood screws spaced at 100mm. Centreboard case cover of timber 170 × 20mm joined to the side walls with flat-head screws 50 × 5mm. Width of centreboard slot in the keel 15mm, in the centreboard case 20mm, in the cover 10–20mm.

**5.2** Centreboard of 5mm metal, minimum weight 24.5kg. The centreboard must be capable of being placed into the centreboard case and taken out from above. For this reason the pivot-bolt hole is provided with a slot. As a safety measure, this slot may be omitted provided the circular hole for the pivot-bolt gives the same draught when the centreboard is lowered fully.

**5.3** For the lowered position a fixed bolt is fastened at the upper end. For the hauled-up position a hole intended for taking a checking bolt may be provided.

**5.4** The bolt for the centreboard is to have a diameter of 16mm or alternatively of 9mm with a 16mm bush. Washers are to be fitted on either side and the bolt fastened with a nut on one side only.

**5.5** The centreboard may be rounded to a radius of 75mm at the corner which is uppermost when the centreboard is fully raised. A 15mm bevel is allowed on both faces of the leading and trailing edges provided that the thickness of the leading edge is not less than 2mm.

### **6. RUDDER**

**6.1** Rudder blade is to be of 4mm metal, minimum weight 8kg and to be of the so-called 'drop rudder' type. It may be bevelled from a distance of 15mm from the edges which are under water when in use, provided that the thickness of the leading edge is not less than 2mm. Rudder cheeks to be of 15mm timber, with a filling piece of 6mm timber. Tiller to be of timber, shape and length left free. Rudder head fitting to accept a removable tiller to be made of metal.

**6.2** The lower edge of the rudder cheeks must not be above the level of the keel where it joins the transom.

## **7 KEELSON**

**7.1** Timber 85 × 35mm with the three floors at stations 7, 8 and 9 joined with 8mm nut-bolts.

## **8 FRAMES**

**8.1** Frames to be timber and spaced 500mm. Side frames under deck to be 40 × 20mm at the top and 80 × 20mm at the bottom. Height of frames amidships as in Drawings No. 1 and 2, height at sides 50mm. Bottom frames at stations 7, 8 and 9 to be 30mm, the others to be 20mm.

**8.2** Frames are to be joined together by 2.8mm rivets; joined with the keel by 6mm nut-bolts; with centreboard case by screws or nails 60 × 3mm; and with centreboard case stiffenings by square rivets, 2.8mm. Additionally on the bottom between every two frames, an intercostal frame is to be fastened of timber 50 × 20mm.

## **9 CLAMP & SEAM BATTENS**

**9.1** Upper clamp and seam battens: timber 38 × 12mm. Chine clamps: timber 50 × 20mm. Seam battens are to be joined to frames by screws or nails 45 × 2.5mm. Chine battens are to be joined to frames by wood screws 45 × 5mm. Clamps are to be joined to frames by 2.8mm copper rivets.

## **10 SKIN PLANKING**

**10.1** Deck, side and bottom planks are to be of 14mm mahogany, subject to paragraph 1.2. On each side of the bottom, three strakes are to be fastened, but only two strakes on the sides.

**10.2** Fastening of skin planking:

- (a) to stem, transom and chine-batten: countersunk screws, 30 × 4.5mm spaced 75mm,
- (b) to keel: 2.5mm square rivets, spaced 75mm,
- (c) to clamp and seam battens: round head screws inserted from inside, 22 × 3mm spaced 75mm on 10mm washers,
- (d) to frames: countersunk screws 30 × 4.5mm, three in number in each plank; in planks of 160mm width and over, four screws,
- (e) to intercostal frames: countersunk screws, 30 × 3.5mm three in number in each plank.

**10.3** The chine may be rounded with a maximum radius of 10mm.

**10.4** Self bailers are allowed in the bottom planking.

**10.5** GRP sheathing may be used on the bottom planks only but may be continued round the chine and up the sides for 20mm.

## 11. RUBBING STRAKE

11.1 A rubbing strake of 25 × 15mm timber is to be fitted all round the boat except the transom.

## 12. DECK AND DECK BEAMS

12.1 Camber of deck beams to be 55mm at extreme width of boat. Deck beams to be fitted at each frame of 20mm timber, at sides 40mm high. The knee-shaped half-beams to be joined to frames by 2.8mm square rivets. At the mast-beams, 30mm timber horizontal knees are fitted. On transom horizontal knees; at stem knee of 25mm filling timber, fastened with 4mm rivets or 5mm screws.

12.2 Longitudinal beams of timber 38 × 12mm to be inserted in deck beams for fastening the 14mm deck planking.

12.3 Fastenings:

- (a) with skin planking and transom; countersunk wood screws 30 × 4.5mm spaced 75mm,
- (b) with clamp and beam respectively; countersunk wood screws 30 × 4mm spaced about 150mm and 100mm respectively,
- (c) with seam battens; wood screws 22 × 3mm spaced about 75mm.

12.4 The breakwater shall be in accordance with the plan and at no point may the vertical height be less than 50mm or more than 100mm except that outer 250mm may be reduced to deck level in a simple curve.

## 13. MAST TRUNK (TABERNACLE)

13.1 Timber cheeks at the sides 85 × 28mm joined to each other and the filling pieces by 6mm rivets; to beams and floors by 8mm nut-bolts and to keelson by nails 60 × 3mm. To obviate rot, the lower edge may be cut away in a shallow vee for half its bearing width measured fore and aft (See Drawing No. 11 and 4A).

13.2 A mast-bolt hole is to be cut with centre 278mm above deck.

## 14. COCKPIT

14.1 The length of the cockpit should be 2950mm, and its greatest breadth 1000mm.

14.2 Coaming timbers 40 × 12mm, joined to beams and deck by screws 30 × 4mm spaced 100mm. On the coaming a half-round timber batten 25 × 12mm is to be joined to the deck and coaming by nails 25 × 2mm. The coaming may be higher than provided in the drawing, up to 35mm above deck.

14.3 The thwart is to be of timber 220 × 20mm joined to the hull at the sides by a timber thwart beam 60 × 25mm and to the centreboard case by countersunk screws 30 × 5mm.

14.4 No holes in the thwart are permitted, other than leads for small control lines with a maximum area of 90 sq cm. However, existing thwarts with holes of greater area than this figure may remain in place until the boat next undergoes restoration which includes the thwart.

## 15. FLOOR PLANKING

**15.1** Planking for the floors is to be of 14mm timber and may be partially removable as shown in Drawing No. 4. The fixed planks to be fastened by 40 × 4.5mm wood screws. At the centreboard case a removable bailing flap may be fitted.

**15.2** For the mainsheet a substantial floorboard 70 × 35mm to be joined to the frames by wood-screws 65 × 6mm and may be fitted with eyebolt(s) for the mainsheet block(s). This board may run over frames 3 and 4, or 4 and 5, or frames 3 to 5, or frames 2 to 5.

## 16. PAINTWORK

**16.1** Finish of Hull optional.

## 17. SPARS

**17.1** All spars are to be made in wood. They should be of knot-free selected timber.

**17.2** Mast: hollow, wall thickness not less than 1/5th of the respective diameter at any given position.

**17.3** Boom: maximum cross-sectional dimensions to be 70mm high and 55mm wide, minimum 60mm and 50mm respectively but may be 50mm and 50mm no more than 60mm from the ends. Tapering from maximum to minimum dimensions is permitted.

**17.4** Gaff: maximum cross-sectional dimensions to be 65mm high and 50mm wide, minimum 60mm and 50mm respectively but may be 50mm and 50mm no more than 60mm from the ends.

**17.5** Boom and gaff are to be fully glued with a groove for taking the bolt rope, see Drawing No.6.

**17.6** Spar fittings are to be of metal; material for sheaves is optional; boom jaws to be metal; gaff jaws to be of ash.

Boom chock with upper surface being 400mm above the deck shall:

- (a) occupy not less than 30% of mast circumference
- (b) be on the after face
- (c) project at least 10mm
- (d) be of durable material.

**17.7** The jib halyard block is hung from the mast cap lug provided for that purpose, by means of the following:

- (a) a shackle on a wire strop, or
- (b) a shackle, or
- (c) directly by a bolt through the shell of the block.

The diameter of the sheave shall not exceed 60mm, the shell shall not exceed 65mm in breadth. Although the design of the mast cap can vary no arrangement may be employed which allows the sheave or halyard bearing surface to be set higher or further forward than the above systems permit. Drawings No. 8 and 8a illustrate the above specification.

**17.8** A spar with wood jaws on the inner end and a metal spike or other device on the outer end may be used to boom out the clew of the jib. The tack however must not be let fly. The length of this spar is left free except that it may not be adjustable.

## **18. RIG**

**18.1** Drawing No. 7 shows the rigging plan.

**18.2** Halyards to be made of any suitable materials.

**18.3** Shrouds are to be of steel wire, minimum diameter 3mm. These may be carried through the deck with chafe protection at that level. Shroud adjusters must be of a type designed to give adjustment only when not sailing (e.g. bottle screws, nut-bolts of small diameter). Mechanisms which facilitate rapid changes in shroud length (levers, handwheels, muscle-boxes and the like) for the individual requirements of reaching, running and beating are not permitted.

**18.4** A kicking strap of optional design and anchoring position may be fitted, except that the bearing point of the boom fitting may not be further than 675mm from the inside of the throat.

**18.5** A main sheet traveller may be fitted at least 1400mm abaft the after side of the mast. The design of traveller is free except that the track must be straight and positioned below deck level.

## **19. SAILS**

**19.1** The permitted sails are mainsail and jib. The maximum sizes of these sails are limited by the permitted dimensions of the spars, the mast band which marks the permitted upper position of the throat, the mast chock, and the positions of the jib tack fitting and jib fairleads on the deck. While racing, the mainsail shall be set with the lower edge of the gaff no higher than the mast band and the boom jaw no lower than the upper face of the mast chock. For shortening sail, reefing points and cringles may be provided on the main and a smaller jib may be used.

**19.2** The sails shall be constructed of single ply woven material (sailcloth). When torn the cloth shall separate into fibres without evidence of a film layer. Cloths of different weight may be used within each sail.

**19.3** The outside diameters of the cringles (eyes) at the head, clew, tack and throat of the sails shall not exceed 55mm. The distance between the centres of these cringles and the luff or leach of the sail shall not exceed 40 mm.

**19.4** Cunningham holes and reefing cringles are permitted in both main and jib. The outside diameter of Cunningham holes and of reefing cringles shall not exceed 55mm.

**19.5** No openings are permitted in the sails other than the cringles, Cunningham eyes and reefing cringles specified in rules 19.3 and 19.4, lacing eyes along the luff and lacing eyes for a reefing line.

**19.6** Primary reinforcing patches of woven sailcloth are permitted at the corners of the sails, the Cunningham holes and the reefing cringles adjacent to the luff and leach. These shall not exceed 330mm in the main and 280mm in the jib, respectively, measured from the centres of the corresponding cringles.

**19.7** Secondary reinforcement of no more than two layers of cloth no heavier than the body of the sail is permitted, but shall extend no more than 1000mm and 850mm from the centres of the corresponding cringles in the main and jib, respectively.



**19.8** To control leech flutter, small reinforcing patches of two layers of the same cloth as the body of the sail are permitted at the end of each seam. These shall not extend more than 100mm in the main and 85mm in the jib, respectively, from the centres of the ends of the seams.

**19.9** Sail battens are permitted in the mainsail only.

**19.10** The mainsail may be fitted with three battens of maximum length 500mm each. The length of the batten pockets shall not exceed 550mm. The batten pockets shall divide the leech into four nominally equal intervals, measured by folding the sail at right angles to the line between the head and clew cringles. The measurement tolerance for the batten pocket positions is +/- 50mm, measured to the centre lines of the batten pockets and the cringles.

**19.11** Anti-chafe reinforcing patches of woven cloth no heavier than the body of the sail are permitted at each end of the batten pockets. Such patches shall not exceed 200mm in diameter, measured from the ends of the batten pockets.

**19.12** Transparent panel(s) of unwoven material of maximum total area 1m<sup>2</sup> are permitted in each sail. The positions, numbers and shapes of such panels are optional, with the restriction that no part shall be closer to the leach than 750mm in the main and 250mm in the jib, respectively.

**19.13** Headboards and other rigid sail reinforcements are prohibited.

**19.14** No part of the mainsail may extend beyond a line perpendicular to the top of the gaff.

**19.15** The maximum width of the head of the mainsail, measured perpendicular to the gaff, shall not exceed 140mm. The leach of the mainsail shall not extend beyond the line joining the point of maximum permitted width of the head to the outer end of the top batten pocket.

**19.16** No part of the mainsail may extend beyond a line perpendicular to the outer end of the boom.

**19.17** The foot of the mainsail shall be attached to the boom by a foot-rope and boom groove for a continuous length of least 1750mm.

**19.18** An adjustable mainsail outhaul is permitted, provided that, when in use, no part of the mechanism or the sail extends or is capable of extending beyond the maximum permitted length of the boom.

**19.19** When racing, the jib tack shall be fastened to the appropriate deck fitting, the jib halliard led to the masthead and the jib sheet taken to a first fairlead no further aft than that measured.

**19.20** The leach of the jib shall not extend beyond a line joining the head and clew points (as defined in the ISAF equipment rules).

**19.21** The registered sail number of the boat and letters indicating the country of registration should normally be displayed on both sides of the main. Such numbers and letters shall comply with the appropriate national or international rules.

**19.22** Sails manufactured before 01.01.2007, which are intended for use in an international regatta, shall be marked by a national measurer, either before that date or, if after 01.01.2007, on presentation of proof of prior purchase.

## 20. DECK FITTINGS

**20.1** Stem-head, forestay fittings and chain plates are to be of metal. Sheet fair-leads, shroud guides, cleat and fixed blocks may be of metal, wood or synthetic materials. Position and type of cleats and sheet leads are left free.

**20.2** Barber-haulers are not permitted.

**20.3** A control line for a jib Cunningham hole may be led through the deck near the forestay fitting.

**20.4** The bearing point of the jib sheet in its fairlead must not be more than 1000mm aft of the aft-side of the tabernacle on the deck always provided that the fore and aft length of the tabernacle does not exceed the specified 85mm.

## 21. EQUIPMENT

**21.1** The following equipment is always to be carried on board:

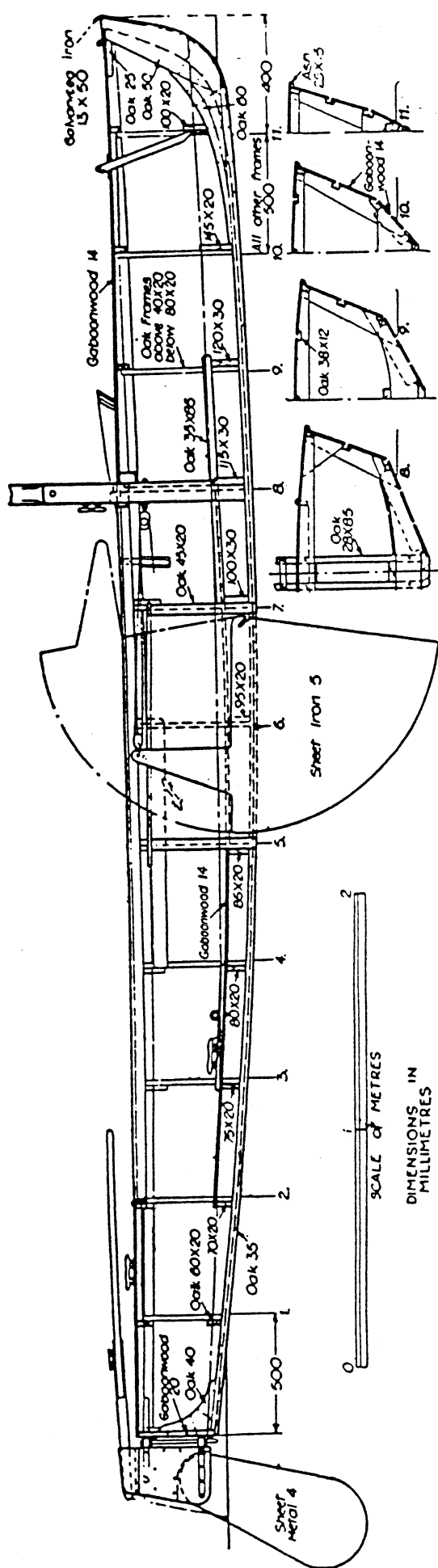
- (a) 2 paddles, each to be not less than 1 metre in length
- (b) 1 painter or mooring line at least 15m in length, for towing, anchoring or mooring
- (c) 1 hand bailer or bucket
- (d) 2 approved buoyancy aids
- (e) 1 anchor minimum weight 2.5kg
- (f) At least 230 litres of removable buoyancy

**21.2** The following restriction applies:

- (a) pumps may be used, but only those of the hand-held type.

## INSTRUCTIONS TO MEASURERS

1. The number allotted to the boat by the National Authority shall be burnt or cut into the keel in figures 50mm high aft of the mast step.
2. Measurements of the hull shall be taken as follows:
  - (a) Within a clear space of 6000mm two vertical posts shall be erected and between them, 1500mm above the floor, a string shall be stretched exactly horizontal using a level.
  - (b) The boat shall be placed for measurement on two supports bottom uppermost so that her fore and aft line is vertically below the string. She shall be so placed that the keel just touches the string close to station 6 (No. 6 frame) and that the centre of the bottom of the boat at the transom lies 203mm below the string.
  - (c) Thereupon proceeding lengthwise the measurements for stations 0, 3, 6, 8, 9 stations should be laid off the hull and marked. Every spacing to be 1500mm except stations 6–8 which shall be 1000mm. At these stations measurements between the string and the keel shall be taken vertically, after which the string may be removed.
  - (d) The profile of the bottom and side at each station shall then be measured from the plane of the keel to the chine and to the deck on both sides. If differences between the two sides of the boat are found, the average shall be given as the measurement. Where the chine is rounded, the point for measurement is to be found by placing two straight edges on the side and bottom across and perpendicular to it.
  - (e) The boat should then be turned upright and the beam measurements, excluding rubbing strake, taken at each of the above stations.
3. The dimensions and workmanship of constructional parts shall be examined to see that they comply with the specifications. Parts which deviate significantly from the specifications or drawings must be replaced.
4. The following measurements of spars are to be taken, the lengths shown being the maximum permitted:
  - (a) Total length of mast from upper side of the deck to the upper part of the mast cap (Drawing No. 6) 4850mm.
  - (b) Total length of boom from inside edge of throat to extreme end 2780mm.
  - (c) Total length of gaff from inside edge of jaw to extreme end 3380mm.
  - (d) Length between lower edge of black band on mast and upper side of boom chock (lower limitation) 2800mm.
  - (e) Distance between upper side of deck and upper side of boom chock (lower limitation) 400mm.
  - (f) Length between fore edge of tabernacle and centre of hole for jib tack 1320mm.
  - (g) Bearing point of sheet lead behind aft edge of tabernacle 1000mm.
5. These measurements and materials of spars and rigging shall be examined to see that they comply with the specifications and drawings. Deviations or faults must be corrected before the measurement certificate is signed.
6. A Sharpie participating in racing should have been weighed or reweighed within the previous four years. Boats reweighed will be issued with a weight report by a National Authority to maintain compliance with Rule 1.2.



SCALE OF METRES  
 DIMENSIONS IN MILLIMETRES

