## 12- FOOT DINGHY CLASS RULES

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The 12-foot dinghy was designed by George Cockshott and recognized as a National Dutch class in 1914.

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#### INTRODUCTION

A 12 foot dinghy (hull, appendages, rig and sails), that wants to participate in competitions is subject to certification by an official measurer. All parts, except the sails, are measured together with the hull after which only the hull is provided with a certification mark. Sails are generally measured separately and provided with a certification mark. Sails can be certified and a certification mark can be provided by a sailmaker, if so appointed in accordance with a license agreement with the Watersportverbond.

A 12 foot dinghy (hull, appendages, rig and sails) may be constructed by anyone provided that it is built according to the standard drawings, building specifications and class rules provided by the Watersportverbond. The equipment shall comply with the construction specifications and these class rules.

Regulations regarding the use of equipment during a race are incorporated in the Rules of Sailing Equipment Part I and in the Racing Rules.

# These are closed class rules, which means that everything that is not expressly permitted by these class rules, is prohibited.

In addition to a certificate for the boat the person responsible aboard must while racing have a license card in possession (see definition of the Yachting Association in rule 46 RRS) and the crew a crew licence card. Information, and an application form can be found on the website of the Sailing Federation (www.watersportverbond.nl).

This summary is intended as an informal background. The class rules of the 12 Foot Dinghy Class start on the next page.

#### PART 1 - ADMINISTRATION

#### Section A - General

#### A.1 LANGUAGE

- A.1.1 The official language of the class is Dutch. In case of a dispute over the translation, the Dutch text shall prevail
- A.1.2 Use of the word "shall" indicates a commitment to. Use of the word "may" indicates that it is permissible.
- A.1.3 When the term is printed bold, the definition in the RRS applies and when a term is printed "*italic*", the definition is in the RRS. This does not apply to terms included in titles.

#### A.2 ABBREVIATIONS

A.2.1 ISAF International Sailing Federation

KNWV Watersportverbond = Dutch Yachting Association

CA Class Authority

RSE Rules of Sailing Equipment RRS Racing Rules of Sailing

RCO Regulations for Class Organizations

#### A.3 AUTHORITY

- A.3.1 The Class Rules Authority of the class is het Watersportverbond.

  A representative of the CA is to be heard by het Watersportverbond on all matters concerning these class rules
- A.3.2 Class Authority of the class is the Dutch Twaalfvoetsjollenclub
- A.3.3 Notwithstanding what is prescribed in these rules, the certifying authority has the power to revoke a certificate and should do so at the request of the Watersportverbond.

#### A.4 BOATS ADMINISTRATION OF THE CLASS

A.4.1 The tasks related to the administration of the boats of the class are carried out by the Watersportverbond.

#### A. 5 AMENDMENTS OF THE CLASS RULES DURING AN EVENT

5.1 At events of the class– see RRS 89.1 (d) –the class organization should not allow the organizing authority to change the class rules without the prior written consent of the 'Watersportverbond'. For all other events rule 87 of the RRS holds.

#### A.6 AMENDMENTS TO THE CLASS RULES

- A.6.1 Amendments to the class rules shall be approved by the Watersportverbond in accordance with the procedure described in the RCO
- A.6.2 In force is the latest version of the class rules, which was approved and published by the Watersportverbond.
- A.6.3 All boats must comply with the current class rules. This holds also for boats that are built or manufactured before the effective date of the class rules in force.

#### A.7 INTERPRETATIONS OF CLASS RULES

A.7.1 Interpretations of class rules shall be given by the Watersportverbond in

accordance with the procedure described in the RvK.

- A.8 SAIL NUMBERS
- A.8.1 Sail numbers shall be issued by the National Authority of the owner
- A.8.2 Sail numbers are issued sequentially starting with "1".
- A.8.3 Sail number must match the number of the certification mark of the hull (see A.10.1 (c))

#### A.9 CERTIFICATE

- A.9.1 A certificate must contain the following information:
  - 1. Name of the class
  - 2. Certifying Authority
  - 3. Owner information (name, address and possibly membership number)
  - 4. Sail number as issued by the National Authority
  - 5. Hull identification (see note)
  - 6. Builder / year
  - 7. Correction Weight
  - 8. Date original certificate
  - 9. Date of issue certificate
  - 10. Dispensations granted

Hull Identification: As hull identification can serve the HIN (Hull Identification Number), the measurement sticker or stamp of the measurer.

#### A.10 FIRST CERTIFICATION

- A.10.1 For the issuance of a certificate for a boat (except sails) that has not previously been certified the following conditions apply:
  - (a) A certified check must be carried out by an official measurer on the boat (except sails). The official measurement form must be completed by this measurer. The certification audit takes place at a time and place to be determined by the official measurer.
  - (b) The measurement form and a completed and signed registration form must be sent to the certifying authority by the owner. The amount payable for the issuance of a certificate, if required, must be transferred to the certifying authority.
  - (c) After a successful certification audit and payment of the amount due for certification, where required, the certifying authority may issue a certificate. In addition, the boat must be provided with a certification mark, so the boat is recognisable and that mark should not be removed. This certification mark may consist of a sticker showing class and sail number or the sail number stamped in the hull.
  - (d) A dispensation granted before January 1 2012 by the Watersportverbond will be renewed automatically every year. The dispensation and hence the certificate shall expire on the moment that an operation takes place on the boat whereby the defect can be repaired. This at the discretion of het Watersportverbond.

#### A.11 VALIDITY OF THE CERTIFICATE

- A.11.1 A certificate loses its validity by:
- (a) A change in any one of the data on the certificate as shown in A.9.1
- (b) Renovations or changes to parts of the boat, based on which a certificate has been issued must be reported to the certifying authority.

- (c) Withdrawal of the certificate by the certifying authority
- (d) Issuance of a new certificate.

#### A.12 RE-CERTIFICATION

- A.12.1 The certification authority may issue a new certificate for a previously measured boat;
  - (a) If the certificate has lost its validity in accordance with A.11(a). after receipt of the old certificate, stating the change and payment of administrative expenses.
  - (b) If the certificate has lost its validity in accordance with A.11 (b) or (c) after any certification audit, at the discretion of the certifying authority, using the procedure described in A.10
  - (c) In other cases, using the procedure described in A.10

#### A.13 FILING OF CERTIFICATION DOCUMENTS

- A.13.1 The certification authority must:
  - (a) Keep the original documents based on which the certificate (and previous certificates) is currently issued.
  - (b) On request transfer these documents to the new certification authority, in case of export of the boat.

#### **SECTION B - Conditions for boats participating in regattas**

Participating boats must conform to the regulations in this section.

#### **B.1 CLASS RULES AND CERTIFICATION**

- B.1.1 **Boats** should:
  - a) be according to the class rules
  - b) have a valid certificate
  - c) have a valid certification mark
- B.1.2 Sails should have a valid certification mark, issued by the Watersportverbond

### PART II – RULES AND RESTRICTIONS

During racing **boat** and **crew** shall comply with the rules in Part II. In case of divergence Chapter C prevails.

The rules in Part II are **closed class rules**. **Checking of certificates and sailing equipment** shall be executed according to the rules for sailing equipment (RSE) except when this part diverges.

#### Chapter C - Conditions for (sailboat) racing.

#### C.1 GENERAL

#### C.1.1 RULES

- (a) Contrary to rule 49.1 RRS (Racing Rules of Sailing) the use of a hiking rope is allowed.
- (b) The RSE (Rules for Sailing Equipment) Part I Use of Equipment –applies.

#### C.2 CREW

#### C.2.1 LIMITATIONS

During a regatta, the **crew** may consist of one or two persons. Crewmembers might be substituted except for the responsible person (in accordance with rule 46 RRS, (Racing Rules of Sailing). The sailing instructions may change this rule.

#### C.3 PERSONAL EQUIPMENT

#### C.3.1 OBLIGATORY

(a) The **boat** shall be equipped with a **lifejacket** at least complying to the minimum standard ISO 12402-5 (EN393): 50N for each crewmember.

#### C.4 ADVERTISEMENT

#### C.4.1 LIMITATIONS

Participant advertisement as per Regulation 20.3.2 of the ISAF Advertisement Code (ISAF Regulation 20) is not allowed.

#### **C.5 PORTABLE EQUIPMENT**

#### C.5.1 OBLIGATORY

- (1) a wooden paddle with a minimum length of 80 cm.
- (2) a floating towline, fastened to the (inner)bow, with a minimum length of 8 meter and with a diameter of 10 mm or more.
- (3) a not fastened hand-operated bilge pump or other bailing material with a minimum content of 1 liter.
- (4) two hoist chains, with at least one side fastened to the eyebolts on the keel.

#### C.5.2 PERMITTED

- a) It is permitted to fit one continuous or two lines to the lower end of the gaff in order to move the gaff from one side of the mast to the other. The reins may be held in tension with shock cord. To this end small guide blocks or fairleads may be fitted to or in the vicinity of the middle bench.
- b) For the crew a hiking rope (with or without handle) is allowed, to use in a direct line between the hand and a fixed fastening point. The fixed fastening point must be situated near the central bench at the end of the centreboard case.

- c) Removable hiking-straps in accordance with 49.1 RRS.
- d) A compass: mechanical, design and installation free.
- e) Wind indicator: mechanical, design and installation free.
- f) Oars with a minimum length of 180 cm, including matching rowlocks.
- g) Electronic instruments for measuring time (watch and or chronometer), laying out the course (compass). These instruments shall operate on internal batteries or solar cells and may not have the possibility of input and correlation of data.
- h) Fenders. No limitation of number.
- i) Tools end reserve material such as shackles, fittings, tiller, ropes etc..
- j) Anchor plus rope.
- k) Mobile phone (not to be used while racing)

#### C.6 SAILS

#### C.6.1 CHANGES, MAINTENANCE AND REPAIR

- (a) Except where these **class rules** allow, **sails** may not be changed in any way.
- (b) One is allowed to do maintenance like the mending of **seams** and the repair of rips without the need of re-measurement and re-**certification**.

#### C.6.2 LIMITATIONS

(a) There is no limitation to the number of **sails** one can use during an event. The sailing instructions may change this rule.

#### C.6.3 MAINSAIL

- (a) USE
  - (1) The **sail** shall be hosted with a halyard. Hosting and lowering of the **sail** must be possible when out on the water.
  - (2) The **leech** extended when necessary shall intersect the upper side of the **spar** of the **boom** and the underside of the **spar** of the **gaff** before the **outermost black band**.
  - (3) The **gaff leech** and the **foot** of the **sail** shall be attached directly to the gaff respectively the boom by continuous marlines with round turns through each eye in the **gaff leech** and **foot** of the **sail** available for this purpose. The marline attaching the foot to the boom may have a maximum of 60 cm adjustment length, measured when the foot is attached tight to the boom.
  - (4) The eye in the **tack** of the **sail** must be fastened with a bolt or a pin to a U-shaped non-movable bracket at the front end of the **boom**.
  - (5) The eye in the top of the luff of the **sail** must be fastened with a bolt or a pin to a non-movable bracket at the bottom end of the **gaff**.
  - (6) The eye in the peak-corner and the eye in the clew of the **sail** shall be fastened direct to the aft end of the **gaff** and the **boom** respectively.
  - (7) The **sail** may have one or two sets of reef-points.
  - (8) It is permitted, when sailing with a reefed sail, to use a noose surrounding mast + halyard.

## Chapter D/E/F - Hull/Hull attachments/Rigging

#### 2.1 <u>RESERVE</u>

#### 2.2 RESERVE

#### 2.3 <u>DEADWEIGHT</u>

- 2.3.1 The deadweight of the bare hull, measured in dry condition, inclusive the fixed metalwork and hoist chains, but without rudder, centreboard, spars, rigging, mast, rigging, floors, sails and other inventory, shall not be not less than 104 kg.
- 2.3.2 "Dry condition" means that the new hull never has been in contact with water and that a hull, which is not new, is dry according to the judgment of the measurer.
- 2.3.3 If the deadweight of the hull is less than 104 kg, the difference, which may not be more than 10 kg, must be added with compensation ballast. The compensation ballast has to consist of two equal pieces of metal, which after inspection and being certified by the measurer, have to be fastened with nails with their biggest surface on the inside keel, one piece behind the mast step and one piece under the back bench, in front of the transom knee.

#### 2.4 CENTREBOARD, RUDDER AND TILLER

#### 2.4.1 Centreboard:

Galvanised- or stainless steel. Thickness of the metal minimum 5,7 mm and maximum 6,3 mm. The centreboard may be varnished. Thickness including varnish maximum 6,5 mm.

There must be a metal stopper on the centreboard.

#### 2.4.2 Rudder

Mahogany, thick 22 mm +/- 1mm. It may be tapered to minimal 7 mm at the edges.

Shape as on the drawing +/-5 mm.

Rudder cheeks: mahogany, oak, ashen or teak 18 mm thick.

The rudder including fittings, but excluding the tiller, shall have a minimum weight of 5 kg. If less than 5 kg, correction weight(s) consisting of one or more pieces of metal may be attached to or let into the rudder head.

Straight fitting *cheeks* are allowed, as on drawing sheet 3. The strips are not allowed to be inlayed, except in the front side of the rudder blade.

The distance between the front side of the rudder head and the transom may not be more than 40 mm.

#### 2.4.3 Tiller

Ashen or oak, the largest cross section being 40x30 mm, length maximal 915 mm. The tiller has to be massive and has to follow a smooth path everywhere. A simple nonadjustable joystick is allowed.

The tiller must be secured.

#### 2.5 SPARS

#### 2.5.1 <u>In general:</u>

All spars should be made of wood, circular and massive.

#### 2.5.2 Mast

The **mast-zero-point** is defined as the lowest point of the mast measured at right angles to the centreline of the mast.

The diameter at the position 1863 mm from the **mast-zero-point** is maximum 73 mm.

The distance from the **mast-zero-point** to the upper side of the halyard sheave is maximum 3855 mm.

The distance of the upper side of the halyard sheave to the ridge for the strops of the shrouds, including possibly a steel protection ring, shall be 21 mm +/-5 mm. The diameter of the mast at 513 mm above the **mast-zero-point** (deck-level) may not exceed 70 mm.

A stainless-steel mast top fitting may be mounted to attach the shrouds to. The fitting, except for the shroud attachment points, should comply to the outside measurements of the mast top.

#### 2.5.3 <u>Boom</u>

The length of the boom excluding the claw may not exceed 3660 mm.

The diameter at half length is maximum 51 mm and at the position of the inside of the forward limit mark it is maximum 41 mm and at the position of the inside of the aft limit mark it is maximum 35 mm. Claw: material wood, massive with a maximum inside width of 90 mm. In the claw ends one may drill a hole to be able to connect the claw ends with a rope. It is obligatory to have a fixed non-movable bracket or U-shaped fitting at the front end of the boom for the fastening of the clew of the sail with a bolt or pin. The centre of this bolt or pin has to coincide with the inside of the forward limit mark. The distance from the centre of this bolt or pin to the boom is maximum 40 mm. The bracket or U-shaped fitting may have more than one set of holes.

For the fastening of the sail to the end of the boom it is allowed to drill a hole beyond the outer limit mark.

The boom may not have a groove.

#### 2.5.4 Gaff

The length of the gaff may not exceed 3660 mm.

The curvature of the gaff, measured half way between the black limit marks must be between 45 and 65 mm.

The diameter at half-length can be maximum 58 mm, at the inside of the lower limit mark maximum 41 mm and at the inside of the upper limit mark maximum 35 mm. It is obligatory to have a fixed non-movable bracket or a U-shaped bracket at the lower end of the gaff for the fastening of the top of the forward leech of the sail with a bolt or pin. The centre of this bolt or pin has to coincide with the inside of the lower limit mark. The distance between the centre of this bolt or pin to the gaff can be maximum 40 mm. It is allowed to have an inlayed U-shaped bracket.

It is allowed to have more than one sets of holes in the fitting or U-shaped bracket provided that the centre of the bolt or pin using these holes will not exceed the inside of the lower limit mark.

For the fastening of the sail to the end of the gaff it is allowed to drill a hole beyond the outer limit mark.

At the end of the gaff, a cleat or belaying-pin is allowed for the fastening of the upper leech at no more than 400 mm before the upper limit mark.

It is permitted to connect the bottom end of the gaff to the mast with a line

The gaff may not have a groove.

#### **Strops**

The locations of the strops on the gaff are: upper strop 1700 mm from the inside of the lower limit mark with a tolerance of 40 mm either side. The distance of the outside of the upper strop to the gaff can be maximum 85 mm. The location of the bottom strop is free, provided the distance between the ends of the strops measured along the gaff is at least 200 mm.

#### 2.5.5 Limit marks

Two limit marks have to be painted in a clear contrasting colour on the boom as well as on the gaff in such a way that the distance between the two limit marks is maximum 3580 mm.

#### 2.5.6 Protection

Covering the mast, boom and gaff with metal, (synthetic)leather, reinforced polyester or epoxy or other synthetic materials instead of normal conservation or protecting materials is only allowed when these materials serve solely for protection.

#### 2.6 <u>RESERVE</u>

#### 2.7 STANDING RIGGING, SHEETING

#### 2.7.1 Shrouds

The shrouds on both sides of the mast shall be of steel wire minimum 3 mm, with a strop laid around the mast top. The other side has to be fastened to the shroud plate with a lanyard.

Massive wire is forbidden.

It is allowed to use a shackle between the lanyard and the shroud plate. Synthetic protection around the shrouds is allowed.

#### 2.7.2 Sheeting.

The blocks have to be fixed with strops to the boom, their position is free. No more blocks are permitted than shown on the drawing, plus a foot block. This foot block should be fastened behind the centreboard case either at the floor timbers or at the inside keel.

A sheet (cam)cleat construction at this foot block is allowed.

When fastening to the inside keel has been chosen, the foot block may be fastened on top of a wooden chock with a maximum height of 140 mm.

It is allowed to have two cam cleats on the insides of the gunnels, which are only to be used for the mainsheet. They should be positioned near or above the middle thwart, at port and starboard.

One or more ratchet blocks are permitted.

The attachment of the mainsheet block to the traveller is free, but has to be sliding free.

#### 2.7.3 <u>Tack-, centreboard- and boomvang tackle.</u>

Tack-, centreboard- and boomvang tackle have only one cleat per tackle. For the tack-, centreboard- and boomvang tackle five sheaves each are permitted. The way to attach the tack tackle to the boom is free.

#### 2.7.4 Boomvang.

The point of attachment to the boom is free, as well as the way of fastening, however the use of a rail or an adjustable construction is not allowed.

The attachment to the bottom end of the mast or to the mast step is free. The distance from the centre of the mast to the lower point of attachment of the boomvang shall be no more than 70 + 10 mm.

For the fastening to the mast step a metal bar is allowed with a diameter of maximum 8 mm, of which the distance measured from the inside to the mast step is 70 + -10 mm (see drawing 4) The length of the bar measured between the insides of the vertical posts can be maximum 150 mm.

The bar has to be mounted on or through the mast step. An adjustable mechanism is not allowed. The bar has to have a stopper at both sides. Contrary to drawing 7A the bar may be curved in the horizontal plane, provided the curve is nowhere wider than 150 mm.

#### 2.7.5 Main halyard

The main halyard must be attached to the lower strop around the gaff. From there it has to be rigged through the upper strop on the gaff and then over the sheave in the mast. Subsequently it goes via the nose block to be belayed on the belaying pin(s).

#### 2.7.6 Trim lines

An outhaul with tackle is allowed. Adjustment while sailing is permitted. For this purpose a cleat near the front sheet block may be mounted.

#### 2.8 RESERVE

#### 2.9 RESERVE

#### 2.10 SPECIAL REGULATIONS

#### 2.10.1 Boats measured before 1 March 1993

When a boat, whose original measurement dates before March  $1^{\rm st}$  1993, is remeasured, the depth measurements from the sheer, the width measurements and the length measurement can deviate from the drawing. These deviations are to be found on the measurement form under the items 100 to 116 included.

#### 2.10.2 Drain holes

In the transom two drain holes may be drilled with a maximal diameter of 25 mm each and a scull hole. Other holes are not allowed. The drain holes should have matching plugs.

#### 2.10.3 Self-bailers

Not more than four self-bailers are allowed.

#### 2.10.4 Buoyancy bags

It is obligatory to have at least 120 litres, inflatable, floating capacity.

At least 2x 40 litres respectively at port and starboard side in front of the central bench and minimal 10 cm below the level of the mast bench. Placing behind the central bench is free provided it is symmetric with regards to the centre line of the boat.

The buoyancy bags have to be fastened properly.

### Chapter G - Sails

#### G.1 COMPONENTS

- G.1.1 OBLIGATORY
  - (a) Mainsail

#### G.2 GENERAL

- G.2.1 RULES
  - (a) **Sails** shall comply to the rules that were in force at the time of certification.

#### G.2.2 CERTIFICATION

- (a) An **official measurer** of het Watersportverbond shall **certify the sails** by means of a **certification mark** (sail-button or sticker). This **certification mark** shall be placed in the **tack-corner** of the sail. On top of that the **official measurer** must sign and enter the date of certification near the **certification mark**. The measurement fee should be paid to the **official measurer**.
- (b) Het Watersportverbond can appoint one or more persons employed by a sail-maker to measure and **certify sails** produced by them in compliance with a licence agreement between them and the Dutch Sailing Association or in compliance with the directives of the ISAF regarding **in-house certification**.
- (c) The **certification mark** must permanently be **affixed** to the sail on the prescribed spot and may not be re-used.

#### **G.2.3 DEFINITIONS**

Notwithstanding the RSE the following definitions are in force.

- (a) Claw angle measurement point: The intersection of the line from the clew point through the throat point with the luff length and head length.
- (b) Half width: The distance between the Half Leech Point and the Claw angle measurement point. (above under (a))
- (c) Three-quarter width: The distance between the Three-Quarter Leech Point and the Claw angle measurement point. (above under (a))

#### G.2.4 SAILMAKERS

(a) No licence is required for the production of **sails**.

#### G.3 MAINSAIL

#### **G.3.1 IDENTIFICATION**

- (a) Location and size of nationality-characters and sail-numbers must comply to appendix G of the Racing Rules
- (b) In addition to the appendix G of the Racing Rules of Sailing the size of the nationality letters and sail numbers should be minimal 200 mm wide with a minimal stem width of 50 mm.

#### G.3.2 MATERIALS

(a) The fibres of the **sailcloth** must be made of polyester

#### G.3.3 CONSTRUCTION

- (a) The **sail** should be a **supple** and a **single canvas sail**.
- (b) The **sail body** shall be made of white **woven cloth**.
- (c) There should be a wire of at least 2 mm in the **luff** of the **sail**, which connects the end-eyes in the tack corner and **top corner**. (throat corner)
- (d) In all four corners of the **sail** shall be an eye installed suitable for the fastening of the **sail** to the boom and **gaff** respectively.
- (e) The inner diameter of the eyes in the corners of the **sail** shall not be larger than 20 mm.

- (f) In the **foot** and **head** of the **sail** should be placed at least 15 eyes, distributed evenly over each length, for the mar-lining of the **foot** and **head** to **boom**, respectively gaff.
- (g) The **sail** must be cut so that the **seams** of the panels are perpendicular to the line between **clew** and **peak**, with the proviso that a maximum tolerance of 5 degrees is allowed.
- (h) Only under the perpendicular to the **leech**, which cuts the **luff** at 450 mm above the **tack corner measurement point**, the panels may have **seams** that are not perpendicular to the **leech**.
- (i) The cutting of the parts of the **sail**, which may be reinforced is free.
- (j) The **sail** may have eyes and reefing lines serving a binding reef.
- (k) The following is permitted: stitching, glue, tape, boltropes coloured leech strips, press eyes, reefing eyes, seam-ends, windows, tell tales, maximum two trim lines and components that are permitted or required under other rules that apply.

#### **G.3.4 DIMENSIONS**

BINEROIONE			
	Minimum	Maximum	
Leech length	5140 mm	5300 mm	
Luff length	1280 mm	1300 mm	
Upper leech length	3470 mm	3580 mm	
Foot length	3470 mm	3580 mm	
Diagonal	3670 mm	3780 mm	
Foot median		5060 mm	
Half width	2600 mm	2830 mm	
Three quarter width		3000 mm	
Primary reinforcement		300 mm	
Secondary reinforcement			
From corner measurement points		600 mm	
For seam ends		100 mm	
Total window surface		0,50 m2	

#### **PART III - APPENDICES**

The rules in part III are **closed class rules**. Measurements shall be carried out according the Rules of Sailing Equipment (RSE) except where this part diverges.

## **Chapter H - Measurement diagrams**

## **Chapter I - Standard drawings**

I.1	GENERAL
I.1.1	COPYRIGHT All boats shall be built according to the standard drawings supplied by or through the Dutch Sailing Association (Watersportverbond). Copying of the standard drawings supplied by or through the Dutch Sailing Association (Watersportverbond) is prohibited based on the Copyright Act.
I.1.2	PRIORITY In the case of divergence between the standard drawings and the rules of Part II, the latter shall prevail.

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I.1.3	STANDARD DRAWINGS

Sheet 1 B	Design hull and mast step, scale 1:5	(May 2011)
Sheet 2 C	Building frames 2, 5, 9, 13 and stern scale 1:1	
	Longitudinal section, scale 1:10	
	Detail centreboard case scale 1:1	
	Stern support and stern knee 1:1	(May 2011)
Sheet 3	Rudder and Tiller, scale 1:1	(January 2005)
Sheet 4	Centreboard and Ironwork, scale 1:1	(January 2005)
Sheet 5 B	Sail Plan and Spars, scale 1:10	(May 2011)

## **Chapter J - Building Regulations**

#### J.1.1 PRIORITY

In case of contradiction between the building regulations and the class rules of Part III, the class rules prevail.

#### J.1.2 GENERAL TOLERANCES

When no tolerances have been mentioned in the building regulations and class rules, the following tolerances apply.

Values in mm

Nominal values in mm 5-100 101-500 501-2000 2001-10000 Allowed tolerances in mm +/-1 +/-2 +/-5 +/-10 For nominal values smaller than 5 mm, the tolerances for the nominal values

must be specified.

#### J.2 BUILDING SPECIFICATIONS

#### J.2.1 TOLERANCES

The nominal dimensions of the parts described correspond with the standard drawings (see 1.1). The measurement form shows the permitted tolerances. In the chapter class rules some nominal and limiting values have specifically been mentioned for clarification purposes.

#### J.2.2 CHOICE OF MATERIAL

Wooden parts have to be made of the species mentioned in these specifications. Other species of wood may be allowed, provided that they have similar properties regarding the purpose and provided that permission in writing has been given by the Dutch National Authority (Watersportverbond). Except for the rivets of the planking and the timbers and where specifically specified one can choose for the metal parts and fasteners the following materials: copper, brass, bronze, (galvanised) steel and stainless steel.

#### J.2.3 GLUE

All those parts that must be clinkered, nailed and screwed to the hull may also be glued to the hull (as an extra).

#### J.2.4 CONSERVATION

Hull and parts may only be protected with a non-reinforced coating of varnish, paint or epoxy, unless these rules prescribe otherwise.

#### J.2.5 LAMINATE

Those parts qualifying for lamination instead of massive wood, may be built from layers of wood, provided the wood grain is running in one and the same direction (laminating).

#### J.2.6 KEEL

Oak, pine-wood, mahogany or teak, 180x50mm.

#### J.2.7 INNER KEEL

Oak, pine-wood, mahogany or teak, dimensioning according to the drawing. An inner keel of 100x19mm, to be fastened on the keel with screws at an interval of about 100mm is permitted.

#### J.2.8 STEM

Oak, 45mm thick, glued to the keel and fastened by clinkers or screws.

#### J.2.9 STERN AND KNEE

Permitted woods: oak, teak, mahogany. The stern, 30mm thick, inlayed in the inside keel and the knee, 20 mm thick. It is allowed to make the stern of one piece 30 mm thick and not being inlayed.

#### J.2.10 TRANSOM

Mahogany, oak or teak, minimum 19mm and maximum 21 mm thick, to be screwed to the stern.

#### J.2.11 CENTREBOARD CASE

The cheeks of the centreboard case to be made of mahogany or teak, minimum 16 mm thick, the fill pieces to be made of mahogany, oak or teak, minimum12 mm thick.

The inside has to have a smooth finish. No further constriction wherever is allowed. The minimal finished width of the slot is to be 11 mm in dry as well as in wet condition of the hull. The half round metal strips, running parallel along the slot, may not overlap the slot.

Cover planks to be made of mahogany, if necessary strengthened with metal strips.

Metal centreboard bolt, 12 mm going through a distance piece of pipe of max 12mm length of 16 mm  $\emptyset$  with maximum 2mm thick flanges on each side **or** a centreboard bolt with a diameter 16 mm  $\emptyset$ , both systems to use closing rings placed under head and nut.

It is allowed to connect the centreboard case with the front rowing seat. The centre of the centreboard bolt in the centreboard case can be at the minimum of 13 mm above the upper side of the inside keel and 1396 mm behind the vertical of the finished bow without metalwork.

#### J.2.12 PLANKING

Mahogany, oak, teak, cedar (only of deciduous trees) or pine-wood, minimum thickness: 8 mm. The planks should be of equal thickness. All planks, except the top plank on port and starboard, should be of the same kind of wood.

The hull is clinker built, 12 strakes at every side, 16 mm overlap.

Clinked with two rivets (copper nails, roved) between each pair of timbers and a rivet through the strake and timber.

The strakes may be glued as extra to each other and to the transom and stem. Slanting of the strake underneath has to be done in such a way that the upper strake is at least 8 mm outside the strake below.

The radii of curvatures of the rounding of the planks and the armpits between the successive planks on the outside of the hull may be maximum 2 mm.

However, rounding is allowed on the inside of the hull with a maximum radius of 4 mm.

At the front- and backside the strakes may be tapered over maximal 500 mm from the stern or the bow.

#### J.2.13 TIMBERS

Oak or ashen16mm wide and 12 mm thick, placed at 178 mm distance, measured centre to centre along the keel. All timbers to be running parallel to the transom. Attention: the distance of the first timber to the transom is different, (see drawing 1, last revision. (see rule I.1.3)

The timbers to be made of one length from gunwale to gunwale running over the keel, wherever this is possible.

Beside the keel and eventually at the subsequent strakes oak or teak wedges should be placed under the timbers where necessary.

#### J.2.14 KEELSONS

Oak, 16 mm thick, height and mutual distance as on the drawing, with the edges fitted to the skin and fastened with a clinker or screw through every strake.

#### J.2.15 MAST STEP

Oak, mahogany or teak, linked up to the hull and to the stem and screwed to the stem. An alternative construction as shown on the drawing is permitted.

A mast pin hole of 61 x 41 mm is allowed, but it has to be reduced to 41 x 41 mm by means of wooden blocks.

It is allowed to fix a stainless-steel plate on the mast step of up to  $120 \times 60$  mm and at least 3 mm thick with a recess, maximum  $41 \times 41$  mm, therein for the mast pin hole. In the plate a hole may be drilled for the threaded end of the eye bolt. On both sides of the plate may be mounted a smaller eye for the centreboard and/or tack tackle. The plate may be laid into the mast step. Height topside plate to measurement line between 527 en 537 mm.

#### J.2.16 GUNWALE

Oak, 32 mm high and 25 mm wide, tapered at the front- and backside to 20 mm. The timberheads fitted to the gunwales or countersunk into it.

#### J.2.17 CARLINES

Oak or the wood of the strakes, 30x10mm preferably rounded with an ornamental groove (without is permitted) and to be screwed to every timber. The first carlines should be put under the benches from the stem to the girder of the steering bench.

The second carlines should be put along the outside of the floorboards from the second support (keelson) till the last support (keelson) of the floorboards.

#### J.2.18 ROWING SEATS

Mahogany, cedar (only of deciduous trees) or teak 190x19mm with two oak knees, 19 mm thick, at each end.

#### J.2.19 MAST BENCH

Mahogany or teak, 200x25mm with two horizontal mahogany or oak knees 25 mm thick and two hanging mahogany or oak knees 19 mm thick. The length of the horizontal knees may be maximum 100 mm longer than the length measured from the drawing. The other tolerances can be found in the measurement form under point 45.

#### J.2.20 STEERING SEATS

Mahogany, cedar (only of deciduous trees) or teak, 265 mm wide and 19 mm thick. Under these seats at the level of the backbench there should be a girder of mahogany or oak 50x19 mm. It is permitted to round off the angle between the steering seats and the mid ships seat.

The backbench in the centre of the boat may be removable. This removable part may have a maximum width of 500 mm.

#### J.2.21 HORIZONTAL STEM KNEE

Oak, 25 mm thick. The length can be up to 100 mm longer than indicated on the drawing.

#### I.2.22 HORIZONTAL STERN KNEES

Oak or mahogany, 20 mm thick. The length can be up to 100 mm longer than indicated on the drawing.

#### J.2.23 FLOORBOARDS

Kind of wood is free, minimum 10 mm thick. The front floorboard to be made in a closed structure. The side floorboards to be made of an open structure by means of laths which must become 70 mm wide at the point of the largest width of the ship. These side floorboards are allowed to be made in three parts lengthwise. A non-skid cover to prevent slipping may be applied.

It is permitted to make an opening in the boards above the self-bailers.

#### J.2.24 RUBBING STREAK

Oak, mahogany or teak or a combination thereof. Size: 22x22 mm, an inlayed messing flat strip of maximal 11x2 mm is permitted.

#### J.2.25 BILGE-KEELS

Oak, minimal 19 mm wide, height 19 mm, length 1850 mm. The rounding of the diameter is free.

The aft ends of the bilge keels must be minimal 500 mm in front of the transom. A metal strip is permitted, flat or half-round, of maximal 12 mm wide and 6 mm thick, placed upon the wood.

The bilge keels are to be placed on the land over the full length between strake 4 and strake 5, without tolerance.

The ends of the bilge keels may be bevelled or tapered over no more than 50 mm.

#### J.2.26 TRAVELLER

As per standard drawing, the material metal 12 mm diameter. The traveller shall be massive. Tolerance on thickness +2 to -1 mm. Stoppers have to be placed so as to allow a travelling distance of the car or shackle of 34 cm from the middle.

#### J.2.27 STEM AND KEEL PROTECTION STRIP

Material half-round metal, minimal 12x6 mm from stem to transom.

#### J.2.28 HOIST CHAINS AND PROTECTION PLATES

Metal, the links must have a thickness of minimal 4 mm.

The holes for the hoist chains in the mast and steering bench are to be reinforced with a metal plate.

The plate on the mast bench should also surround the mast.

#### J.2.29 EYE BOLTS

These may have, contrary to the drawing, a minimal thickness of 10 mm.

#### J.2.30 SHROUD PLATES

Two pieces, metal, placed in such a way, that the distance of the centre of the plates, measured from the centre line from the ship to the front of the bow, without the metalwork, is 590 mm.

# J.2.31 BELAYING-PINS Two pieces to be placed into the mast bench.

# J.2.32 ROWLOCK-BASES Efficient, suitable, four pieces.

MEA	ASUREMENT FORM 12-FOOT DINGHY			
Nan	ne owner :			
Add	ress :			
Saili	ing club: member number:			
Clas	s and sail number : 12- foot dinghy			
Nan	ne boat :			
Tele	ephone(s) and e-mail :			
Buil	der and year of building :			
Gen	eral statements			
a.	Have the correct kind of woods been used	Yes [ ]	No [ ]	n.a. [
	Has the last edition of the drawings been used	Yes []	No [ ]	n.a. [
	Has a building statement been given	Yes []	No [ ]	n.a. [
	Have important parts of the hull been changed	Yes [ ]	No [ ]	n.a. [
	Has a renovation statement been given	Yes []	No [ ]	n.a. [
	Is there a CB-stamp in the boat	Yes []	No [ ]	n.a. [
	Is there a sticker in the boat	Yes []	No [ ]	n.a. [
0	Is there compensation weight in the boat	Yes []	No[]	n.a. [
	Has an "Owner statement" been given	Yes []	No[]	n.a. [
	Has the boat passed certification	Yes []	No[]	-
_	Place of the measurement sticker	168 [ ]	NO[]	n.a. [
1.	Place of the CB-stamp			
Com	nments:			
	clare having weighed and measured this yacht and his measurement form are in accordance with my			y me
	ne measurer :			

Signature:

Date of measurement:

Stamp:

#### **MEASUREMENT REPORT**

Description

≈

Min.

Max.

Setting the horizontal reference line (the measurement line)

- at the stem with the aid of the stem gauge (20)

- at the transom above the low side of the hull planking included (528)

Note: In case of a re-measurement of a dinghy measured before 1-1-1993 one does measure points 1 to and included 17, but they are not taken into account in the final judgement. Points 100 to 111 included are the substituting measurements here.

110	Description			Max.
1	Length over all (exclusive metalwork)	3650	[]	3670
	Hull depths (from the horizontal reference line)			
2	At 420 mm from front side stem to inside inside-stem (mould 2)	557	[]	577
2a	At 560 mm from front side stem to inside inside-keel (mould 2a)	610	[]	630
3	At 954 mm from front side stem to inside inside-keel (mould 4a)	642	[]	662
4	At 1932 mm from front side stem to inside inside-keel (mould 9)	665	[]	685
5	At 2796 mm from front side stem to inside inside-keel (mould 13)	621	[]	641
6	At 0 mm from back side transom to bottom side skeg	699	[ ]	719
	Sheer line (from the horizontal reference line)			
7	At 560 mm from front side stem to upper sheer (mould 2a)	68	[ ]	88
8	At 1068 mm from front side stem to upper sheer (mould 5)	116	[]	136
9	At 1932 mm from front side stem to upper sheer (mould 9)	172	[]	192
10	At 2796 mm from front side stem to upper sheer (mould 13)	189	[]	209
11	At 0 mm from backside transom to upper sheer	149	[]	169
	Widths (to inside hull planking)			
12	Transom width at 190 mm under upper sheer	808	[]	828
13	Transom width at the upper sheer level	824	[]	844
14	Width at 2796 mm from front side stem at the upper sheer	1272	[]	1292
15	Width at 1932 mm from front side stem at the upper sheer	1382	[]	1402
16	Width at 1068 mm from front side stem at the upper sheer	1120	[]	1140
17	Width at 420 mm from front side stem at the upper sheer (only 15 mm	573	[]	588
	tolerance)			
	Gauge			
18	Template 2 at 420 mm from front side stem	0	[ ]	20
19	Template 5 at 1068 mm from front side stem	0	[ ]	20
20	Template 9 at 1932 mm from front side stem	0	[]	20
21	Template 13 at 2796 mm from front side stem	0	[]	20
	Stern			
22	Transom, mahogany / oak / teak , thickness	19	[ ]	21
23	Stern stiffener, oak, thickness	30	[]	32
23a	Stern knee, oak, thickness	19	[]	21
23b	Transom mould, difference between transom and mould	0	[]	10
	Stem			
24	Horizontal distance from stem to vertical from front side stem at 550	120	[]	140
	mm under the horizontal reference line (after placing the boat			
	horizontal)			
25	Stem mould, tolerance	0	[]	20
25a	Horizontal stem knee, oak	23	[]	26
				1

0.1	Centreboard case and thwarts	46.15		10.55
26	Distance front side centreboard slot to front side stem	1340	[ ]	1360
27	Length centreboard slot along keel	995	[]	1005
28	Height centreboard case above bottom side keel at location front side cover	356	[]	376
29	Centre of centreboard bolt to front side stem	1386	[]	1406
30	Centre of centreboard bolt to upper side inside keel	13	[ ]	25
31	Centreboard bolt 12 mm $\emptyset$ through 12 mm length of distance piece of pipe of 16 mm $\emptyset$ + closing rings or centreboard bolt of 16 mm $\emptyset$ + closing rings		yes / no	
32	Filling piece, mahogany, thickness	12	[ ]	-
33	Effective width of slot of centreboard case	11	[ ]	-
34	Cover plank mahogany + when necessary strip strengthening		yes /no	
35	Centreboard case cheeks, mahogany / teak, thickness	16	[ ]	-
36	Thwarts (rowing seats), wide 190 mm, thickness	19	[ ]	-
37	Front side forward thwart to front side stem	933	[ ]	973
38	Height forward thwart under the sheer at location of mould 5	174	[ ]	194
39	Front side mid thwart to front side stem	1921	[]	1941
	Mast step and mast bench			
40	Place centre of mast hole from stem	409	[_]	429
41	Size of the mast hole			75
42	Mast bench, mahogany, 200x25 mm	-1		+1
	With two horizontal knees 25 mm thick	-1		+1
10	With two vertical knees at least 19 mm thick	0		+7
43	Height upper side mast step under the measure line	527		537
	Centreboard and rudder		F 3	6.0
44	Centreboard, galvanised or stainless steel. The metal thickness	5.7		6.3
4 5	Centreboard including varnish or paint, thickness	n.a.		6,5
45	Centreboard, in conformity with the mould, deviation	-5		+5
46	Rudder, in conformity with the mould, deviation	-5		+5
47	Rudder, thickness of the wood, middle	7	<u>[</u> ]	23
40	thickness of the wood, edge	16	<u>l</u>	21
48 49	Cheeks, mahogany, ash, oak or teak thickness	10	<u></u>	
49	Tiller, ash / oak, size (chapter D/E/F art. 2.4.3)		l J	40x3 0
50	Length tiller		[ ]	915
51	to 55 on reserve			
	Standing and running rigging, mainsheet			
56	Shrouds, diameter	3	[ ]	-
57	Shroud plates, distance hart to stem, measured along measure line	570	[ ]	610
58	Traveller, metal, diameter	12	[ ]	
59	Blocks mainsheet with strops, positions free		yes / no	
60	Tack, boomvang, centreboard tackle each allowed one cleat		yes / no	
61	Boomvang and tack tackle each with maximum 5 sheaves		yes / no	
62	Centreboard tackle with maximum 5 sheaves		yes / no	
	Mast (wood, massive, circular)			
63	Total length of the mast from the mast-zero-point to top, maximum	-	[ ]	3876
64	Length from the mast-zero-point to upper side sheave	-		3855
65	Diameter at 513 mm above the mast-zero-point	-	[]	70
66	Diameter at 1830 mm above the mast-zero-point	-	[]	73
67	Diameter at the top of the mast	-	[]	57
68	Length mast pin (38x38, must be in the centre of the mast)	32	[]	
			-	

	Boom (wood, massive, circular)			
69	Length excluding the claw (chapter D/E/F 2.5.3), maximum	-	[ ]	3660
70	Distance between the two black ribbons (limit marks)	-	Γĵ	3580
71	Diameter at half length	-	[ ]	51
72	Diameter at the claw	-	[ ]	41
73	Diameter at the end at location inner side of the black ribbon	-	[]	35
	<b>Gaff (wood, massive, circular)</b> maximum length 3660 mm (chapter D/E/F 2.5.4)			
74	Length gaff	-	[ ]	3660
75	Distance between two black ribbons (limit marks)	-	[]	3580
76	Diameter at half length	-		58
77	Diameter at location lower black ribbon	-	[]	41
78	Diameter at location upper black ribbon	-	[ ]	35
79	Position upper strap from lower black ribbon	1660	[ ]	1740
80	Distance outside upper strap to gaff	-	[]	85
81	Fixed bracket at the lower end		yes / no	
82	to 85reserve			
	Remaining construction parts			
86	Planking, mahogany, cedar (only of deciduous trees), oak, teak, pinewood (thickness)	8	[]	-
87	Number of strakes each side	12	yes / no	
88	Number of timbers, 16x12 mm, centre to centre 178 mm	19	yes / no	
89	Floorboards, thickness : front - closed : side - raster	10 70	[ ] yes / no [ ]	- 80
90	Bilge keels, oak, 19x19; number 2; length (On the edge of strake 8 and 9 from upper sheer)	1830	[]	1870
91	Distance aft side bilge keels to backside transom	500	[ ]	
92	Distance bottom side steer thwart to inside keel	190	[]	210
93	Steer bench thwart beam, mahogany / oak, 50x19 mm		yes / no	
94	Width steering benches, minimal thickness 19 mm	245	[]	285
95	Material inner keel: Oak, pine-wood, teak or mahogany			
	Dead weight			
96	Dead weight dry hull, including fastened metalwork and hoisting chains	104	[]	-
97	Compensation ballast, to be mounted in two equal pieces on the inside keel: one behind the mast step, one under the aft thwart	-	-	10kg
98	to 99reserve			

## At the re-measurement of ships , originally measured before 1/3/1993, the following applies: Depth measurements from the upper sheer

100	At 420 mm from front side stem to upper side inside stem	497	[ ]	523
101	At 1070 mm from front side stem to upper side inside keel	522	[ ]	548
102	At 1930 mm from front side stem to upper side inside keel	487	[ ]	513
103	At 865 mm from backside stern to upper side inside stem	427	[ ]	453
	Width measurements (to inside skin)			
104	Transom width at 190 mm under the upper sheer.	812	[]	838
105	Transom width at the point of the upper sheer.	822	[ ]	848
106	At 865 mm from the backside transom at the point of the upper sheer	1277	[ ]	1303
107	At 1930 mm from the front side stem at the point of the upper sheer	1382	[]	1408
108	At 1070 mm from the front side stem at the point of the upper sheer	1127	[ ]	1153
109	At 420 mm from the front side stem at the point of the upper sheer	577	[ ]	603
110	At 420 mm from the front side stem at 468 mm under the upper sheer	292	[ ]	318

<sup>111</sup> The overall length (excluding fittings) with the old tolerance is between 3645 and 3675 mm.