

INTERNATIONAL FORMULA 18 CLASS RULES

August 2018 (Update 01/08/2018)

NED proposal #~~2-8~~ WC meeting Denmark July 2017 v.18052017

Verwijderd: 1

INDEX

International Formula 18 Class Rules 2018

NED proposal #~~2-8~~ WC meeting Denmark July 2017 v.18052017

2

Verwijderd: 1

INTRODUCTION

FORMULA 18 CLASS RULES GUIDING PRINCIPLES:

This introduction only provides an informal background and the International Formula 18 Class Rules proper begin on the next page.

The IF18CA box measurement rule allows manufacturers to develop catamarans that are competitively priced yet allowing freedom to builders to develop higher levels of performance. Being open to any manufacturer allows many builders and sailmakers to compete and so keep costs to a minimum.

The Class remains aware to keeping development under control, maintaining a good balance between cost and performance.

The use of crew extra weights allows for fairer racing with more women and youth involved as helms and crews.

IF18CA measures hulls, hull appendages, rigs and sails which are required to conform to IF18CA standards, such boat parts only being altered to stay in line with current IF18CA rules.

PLEASE REMEMBER:

THESE RULES ARE **CLOSED CLASS RULES** WHERE IF IT DOES NOT SPECIFICALLY SAY THAT YOU MAY – THEN YOU SHALL NOT.

COMPONENTS, AND THEIR USE, ARE DEFINED BY THEIR DESCRIPTION.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

- A.1.1 The official language of the IF18CA is English and in case of dispute over translation the English text shall prevail.
- A.1.2 The word “shall” is mandatory and the word “may” is permissive.
- A.1.3 Except where used in headings, when a term is printed in “**bold**” the definition in the ERS applies and when a term is printed in “*italics*” the definition in the RRS applies.

A.2 ABBREVIATIONS

- A.2.1 WS World Sailing
- MNA WS Member National Authority
- IF18CA International Formula 18 Class Association
- ERS Equipment Rules of Sailing
- RRS Racing Rules of Sailing

A.3 AUTHORITIES

- A.3.1 The international authority of the class is WS which shall co-operate with the IF18CA in all matters concerning these **class rules**.

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 WS has delegated its administrative functions of the class to IF18CA.

A.5 CLASS RULES CHANGES

- A.5.1 At class events RRS 87 and WS Regulation 10.11 apply.

A.6 CLASS RULES AMENDMENTS

- A.6.1 Amendments to the **class rules** are subject to the approval of both WS, in accordance with the WS Regulations, and the World Council of the IF18CA, in accordance with its Constitution.

Verwijderd: A.3.2 - The IF18CA shall keep record of the official measurers.

Verwijderd: 1

A.6.2 Amendments to the **class rules** will become effective at least one year after publication, unless it is deemed essential that these become effective sooner.

A.7 CLASS RULES INTERPRETATION

A.7.1 Interpretation of the **class rules** shall be made in accordance with the WS Regulations.

A.7.2 Any interpretation of the **class rules** at an event shall be made in accordance with the RRS. The organising authority shall inform WS and the IF18CA of any such interpretations.

A.8 INTERNATIONAL CLASS FEE AND WS BUILDING PLAQUE

A.8.1 The boat builder shall pay the International Class Fee.

A.8.2 IF18CA shall, after having received the International Class Fee for the hulls, send the WS Building Plaque to the builder.

Section B – Boat Eligibility

For a **boat** to be eligible for *racing*, it shall comply with the rules in this section.

B.1 CLASS RULES AND CERTIFICATION

B.1.1 The **boat** shall be in compliance with the **class rules**.

B.1.2 The boat shall hold a valid **F18 C**ertificate (see Appendix B) **issued by the equipment manufacturer or a manufacturer-recognized dealer**. A **boat** shall not hold more than one valid **F18 C**ertificate at any time except as permitted by B.1.4.

B.1.3 The boat shall hold a current valid **ENDORSED F18 Certificate** if required in accordance with the notice of race of the event. An **ENDORSED F18 Certificate** is one for which the data on the **certificate** has been verified and signed off by an **official measurer**.

B.1.4 A **boat** may hold one or more additional separate **certificates** for **mainsail, jib** and **gennaker**.

NED proposal #2-8, WC meeting Denmark July 2017 v.18052017

Verwijderd: :

Verwijderd: ;

Verwijderd: c

Verwijderd: c

Verwijderd: 2

Verwijderd: 2

Verwijderd: B.2 . CERTIFICATION MARKS .

Verwijderd: 1

PART II – REQUIREMENTS AND LIMITATIONS

The **crew** and the **boat** shall comply with the **class rules** in Part II when *racing*. In case of conflict, Section C shall prevail.

The rules in Part II are **closed class rules**. **Certification control** and **equipment inspection** shall be carried out in accordance with the ERS except where varied in this Part.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

- (a) RRS 49.1 and RRS Appendix G.1.3 (d) shall not apply.
- (b) The ERS Part I – Use of Equipment shall apply.

C.2 CREW

C.2.1 LIMITATIONS

- (a) The **crew** shall consist of two (2) persons who are both member of the IF18CA.
- (b) The **crew** shall be able to re-right the **boat** after a capsize. The race committee or technical committee may ask the **crew** to demonstrate their ability to do so.

C.2.2 WEIGHT

- (a) The minimum **crew** weight is 115.0 kg.
- (b) The **crew** shall use the **sails** and crew extra weights in accordance with the following weight categories:
 1. **Crew** from 115.0 kg to less than 130.0 kg shall sail with the Small Jib and the Small Gennaker and then shall carry crew extra weight equal to half the difference between their actual weight and 130.0 kg.
 2. **Crew** weighing 130.0 kg and over may sail with the Small Jib and the Small Gennaker without carrying crew extra weight.
 3. **Crew** from 130.0 kg to less than 150.0 kg may use the Large Jib and the Large Gennaker and then shall carry crew extra weight equal to half the difference between their actual weight and 150.0 kg.
 4. **Crew** weighing 150.0 kg and over may use the Large Jib and the Large Gennaker without carrying any crew extra weight.

- (c) Crew extra weights shall be of metal and securely fastened on the port side, either to the outside of the front beam or to the strut, and shall be removable for checking.
- (d) **Crews** may be weighed at registration for an event and may be reweighed at any time by the race committee.
- (e) The **crew** shall be dressed in underwear or swimming costume, without shoes, when weighed.

C.3 PERSONAL EQUIPMENT

C.3.1 MANDATORY

Each crew member shall wear a **personal floatation device** to the minimum standard ISO 12402-5 (level 50), USCG Type III, AUS PFD II, or equivalent.

C.3.2 OPTIONAL

- (a) Trapeze harness for each crew member
- (b) All other **personal equipment**

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance with the WS Advertising Code.

C.5 PORTABLE EQUIPMENT

C.5.1 MANDATORY

(a) FOR USE

1. One righting line, minimum 4 metres long and 8 mm minimum diameter

C.5.2 OPTIONAL

(a) FOR USE

1. Devices that provide timing, heading data, and/or heading memory but which do not transmit or receive data
2. Equipment required or allowed in accordance with the notice of race of the event

(b) NOT FOR USE

1. Equipment required or allowed in accordance with the notice of race of the event

C.6 BOAT

C.6.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The application over the **hull** surface of vinyl or other film, except for performance enhancing film, is allowed only for the purpose of displaying advertising and graphics.
- (b) Routine maintenance such as painting, sanding, and polishing of the **hulls**, hull appendages and **rig** is permitted, provided that the intention and the effect is to decorate or polish those parts only.
- (c) Repairs of the platform, hull appendages, **rig** and **sails** are permitted.

C.6.2. WEIGHT

- (a) The weight of the **boat** ready to sail, including any corrector weights, shall be at least 180.0 kg.
- (b) The weight of the **boat** ready to sail, excluding corrector weights, shall be at least 173.0 kg.
- (c) The weight of the **boat** ready to sail shall be the weight of the assembled platform as described in section D, with the **hull appendages** as in section E, the **rig** as in section F and a set of **sails** as in section G, carrying all equipment and control lines normally bolted, screwed or otherwise fitted on the **boat**, including mandatory portable equipment and, if fitted, one device that provides heading data.
- (d) Corrector weights shall be of metal and securely fastened on the starboard side, either to the outside of the front beam or to the strut, and shall be removable for checking.

C.6.3 FLOATATION

- (a) It is the responsibility of the **skipper** to ensure at all times the water tightness of the **boat**.
- (b) Hatch covers, and drain bungs if fitted, shall be kept in place when sailing.

C.7 HULLS

C.7.1 LIMITATIONS

- (a) Only two **hulls** shall be used during an event, except when a **hull** has been lost or damaged beyond repair and the race committee has approved the substitution.

C.8 HULL APPENDAGES

C.8.1 LIMITATIONS

- (a) Only two **daggerboards** and two **rudders** shall be used during an event, except when a **hull appendage** has been lost or damaged beyond repair and the race committee has approved the substitution.

C.9 RIG

C.9.1 LIMITATIONS

- (a) Only one set of **spars** shall be used during an event, except when lost or damaged beyond repair and the race committee has approved the substitution.

C.9.2 BOWSPRIT

- (a) The bowsprit shall be positioned on the centreline of the **boat**.

C.9.3 STANDING RIGGING

- (a) **Standing rigging** shall not be adjusted.
- (b) The forestay shall be positioned on the centreline of the **boat**.

C.9.4 RUNNING RIGGING

- (a) The way of leading **running rigging** is optional provided that it shall be led outside the mast **spar**.

C.9.5 OTHER RIGGING

- (a) Trapeze wires may be adjusted in height.

C.10 SAILS

C.10.1 LIMITATIONS

- (a) All **sails** shall be hoisted or carried aboard.
- (b) Only one set of **sails** shall be used during an event, except when lost or damaged beyond repair and the race committee has approved the substitution.

C.10.2 MAINSAIL

- (a) USE
 - (1) The **sail** shall be hoisted with a **halyard**. The arrangement shall permit hoisting and lowering of the **sail** whilst afloat.
 - (2) The luff bolt rope shall be in the spar groove.

C.10.3 JIB

- (a) USE
 - (1) The **sail** shall be set on the **forestay**.
 - (2) The **tack point** shall not be fixed below the apex of the bridle wire.

C.10.4 GENNAKER

- (a) USE
 - (1) The sail shall be set between the **mast** and the **bowsprit**.

Section D - PLATFORM

D.1 PARTS

D.1.1 MANDATORY

- (a) Two **hulls**
- (b) Two beams
- (c) Trampoline

D.2 GENERAL

D.2.1 IDENTIFICATION

- (a) **Hulls** shall have a serial number.

International Formula 18 Class Rules 2018

NED proposal #2-8, WC meeting Denmark July 2017 v.18052017

Verwijderd: 1

- (b) From 1 November 2009, all new **hulls** shall carry the WS plaques permanently placed on the transoms or on the inside of the **hulls** just below the rear beam.

D.2.2 DEFINITIONS

- (a) Boat Centre Plane: the vertical longitudinal plane of the **boat** that passes through the centre point of the front and rear beams.

D.2.3 BUILDERS

- (a) Manufacturing without a WS or IF18CA licence is allowed.

D.2.4 FITTINGS

(a) MATERIALS

1. Materials are optional, except for - unless expressly stated otherwise - carbon fibre.
2. Carbon fibre is allowed in cleats and turning blocks.

(b) MANDATORY

1. Shroud attachment fittings
2. Forestay bridle attachment fittings
3. Bowsprit and bowsprit bridle attachment fittings

(c) OPTIONAL

1. Fittings for the attachment of the trampoline
2. Fittings for hoisting, retaining and lowering/retrieving of **sails**
3. Fittings for placement and retention of **rig** and **hull appendages**
4. Fittings for adjustment and control of **sails, mast** and **hull appendages**
5. Reinforcements at fitting points
6. Foot loops, toe straps, **trapezes** and crew restraining line
7. Devices, and their fittings, which provide timing, heading, and/or heading memory but which do not transmit or receive data
8. Mechanical wind indicators
9. All other fittings

D.3 HULLS

D.3.1 MATERIALS

(a) The hull shells and internal framing shall be built from one of the following combinations of materials:

- i. polyester or vinylester resin, glass fibres, polyester gel coat, with a core of PVC or balsa or felt.
- ii. wood, epoxy, glass fibres, and paint;
- iii. injected plastic

(b) Epoxy glue is permitted for joining components.

(c) Materials for applied non-slip surfaces and for sealing strips for daggerboard slots are optional.

Verwijderd: the combination of wood-epoxy or injected plastic
Met opmaak: Tabs:Niet op 1.25 cm

D.3.2 CONSTRUCTION

(a) **Hulls** may be symmetrical or asymmetrical.

(b) **Hulls** may have bulkheads and sub-decks.

(c) Hull shells may have local reinforcements.

(d) Holes as large as necessary for the installation of fittings and passage of lines may be made in the **hulls**.

(e) Each **hull** shall have at least one inspection hatch.

(f) Non-slip surfaces, built in or applied to the **hulls**, are allowed.

Verwijderd: <#>Each **hull** shall have a daggerboard case which is positioned in the centre plane of the **hull**.

D.4 BEAMS

D.4.1 MANDATORY

- (a) Front beam
- (b) Rear beam

D.4.2 CONSTRUCTION

(a) The beams shall be made of extruded aluminium profiles of constant section.

(b) The curvature of the beams shall be limited to a maximum of 15 mm.

(c) Local reinforcements are permitted inside the beams for supporting hull fixing bolts.

(d) The beams may accommodate adjustment and retention lines.

(e) Holes as large as necessary for the installation of fittings may be made in the beams.

(f) The beams shall have end caps that are smooth and blunt, of optional material. The end caps may have holes to accommodate adjustment and retention lines.

(g) The mast step shall be fixed on the front beam on the centreline of the **boat**.

Verwijderd: 1

- (h) A local reinforcement is permitted inside the front beam for the mast step.
- (i) The front beam may have a strut and tie of optional material, excluding carbon.
- (j) The front beam may incorporate or have fitted a jib traveller track and/or a self tacking system.
- (k) The rear beam may incorporate a mainsail traveller track.

D.5 TRAMPOLINE

D.5.1 MATERIALS

- (a) The type of material used is optional; however, netting is not permitted.
- (b) The material shall not have holes larger than 5 mm, with the exception of holes for adjustment of **sails, mast** and **daggerboards**, as well as for trampoline tensioning.

D.5.2 CONSTRUCTION

- (a) Storage bags and pouches are permitted.

D.6 ASSEMBLED PLATFORM

D.6.1 CONSTRUCTION

- (a) The **hulls** shall be joined rigidly by a front beam and a rear beam.
- (b) A single trampoline, which may be in separate sections, shall cover the area between the beams and the **hulls**.

D.6.2 DIMENSIONS

- (b) The maximum hulls length shall be 5.52 m.
- (c) The maximum boat beam shall be 2.60 m.

Section E – Hull Appendages

E.1 PARTS

E.1.1 MANDATORY

- (a) Two **daggerboards**
- (b) Two rudder assemblies, each comprising a rudder blade, rudder casting, tiller arm, rudder pin or pintles

- (c) Rudder gudgeons
- (d) Tiller cross bar

E.1.2 OPTIONAL

- (a) Tiller extension

E.2 GENERAL

E.2.1 IDENTIFICATION

- (a) The **daggerboards** shall have unique serial numbers permanently placed at or near the top of the **daggerboards**.

E.2.2 MANUFACTURERS

- (a) Manufacturing without a WS or IF18CA licence is allowed.

E.2.3 FITTINGS

See D.2.4(a) and D.2.4(c).

E.3 DAGGERBOARDS

E.3.1 RULES

- (a) There shall be one **daggerboard** per **hull**.

E.3.2 MATERIALS

- (a) The **daggerboards** may be made using epoxy resin, carbon, wood, glass fibre, foam plastics, resins, paints, glues and metal fastenings.

E.3.3 CONSTRUCTION

- (a) The **daggerboards** shall have fixed parts.
- (b) The **daggerboards** shall be fitted so that they cannot protrude more than 1400 mm from the bottom of the **hulls**.
- (c) The cross section of each **daggerboard** shall be symmetrical about their centre plane.
- (d) The **daggerboards** shall be straight. The manufacturing tolerance is 10 mm of curvature over the total length of the board.

Verwijderd: 2

Verwijderd: 1

- (e) ~~Each daggerboard shall have its centre plane positioned within 5 mm of the centre plane of the hulls at its upper and lower penetration through the hull shell.~~
- (f) The **daggerboards** may have no angle or may be angled outwards at the keel from the Boat Centre Plane. The **daggerboards** may be angled inwards at the keel from the Boat Centre Plane to the extent this is caused by the curvature of the front beam, as per rule D.4.2 (b)
- (g) The centre of mass of the **daggerboards** shall be in the top 50% of the height of the board.
- (h) Height restraining and adjusting systems are allowed.

Verwijderd: The

Verwijderd: s

Verwijderd: be

Verwijderd: in

E.3.4 WEIGHTS

- (a) The maximum weight of each **daggerboard** is 5.5 kg.

E.4 RUDDERS

E.4.1 RULES

- (a) There shall be one **rudder** hung on the transom of each **hull**.

E.4.2 MATERIALS

- (a) Materials for the rudder assemblies, except rudder blades, and rudder gudgeons are optional, except carbon fibre.
- (b) Rudder blades may be made using epoxy resin, carbon, wood, glass fibre, foam plastics, resins, paints, glues and metal fastenings.
- (c) Materials for the tiller extension are optional.

E.4.3 CONSTRUCTION

- (a) The rudder assemblies shall comprise retention devices capable of retaining the rudders to the **hulls** in event of capsize.
- (b) The rudder assemblies may comprise a pivoting and/or lowering system.
- (c) The cross section of each rudder blade shall be symmetrical about their centre plane.
- (d) The rudder blades shall be positioned in the centre plane of the **hulls**.
- (e) The **rudders** may have no angle or may be angled outwards at the keel from the Boat Centre Plane. The **rudders** may be angled inwards at the keel from the Boat Centre Plane to the extent this is caused by the curvature of the front beam, as per rule D.4.2 (b)

Verwijderd: 1

- (f) The centre of mass of the rudder blades shall be in the top 50% of the height of the blade.
- (g) The tiller cross bar shall be made of aluminium profile of constant section.
- (h) The tiller cross bar may have reinforcements in the central fittings and to support the connections to the tiller arms.

Verwijderd: Pagina-einde
- ... [2]

Section F – Rig

F.1 PARTS

F.1.1 MANDATORY

- (a) **Mast**
- (b) **Bowsprit**
- (c) **Standing rigging**
- (d) **Running rigging**
- (e) **Other rigging**

F.1.2 OPTIONAL

- (a) **Boom**

F.2 GENERAL

F.2.1 IDENTIFICATION

- (a) The mast shall have a unique serial number permanently placed near the Mast Datum Point.

F.2.2 DEFINITIONS

- (a) Mast Datum Point: the point located at the front edge of the mast spar, on the longitudinal axis, on the lower end of the profile (see Appendix A).

F.2.3 MANUFACTURERS

- (a) Manufacturing without a WS or IF18CA licence is allowed.

F.2.4 FITTINGS

See D.2.4(a) and D.2.4(c).

Verwijderd: 2

Verwijderd: 3

Verwijderd: 1

F.3 MAST

F.3.1 CONSTRUCTION

- (a) The **mast** shall be made of an extruded aluminium profile of constant section.
- (b) The **mast** shall have one fixed sail groove, which shall be an integral part of the mast **spar** and shall be of the same material.
- (c) The **mast** shall be fitted with a mast heel of optional material.
- (d) The **mast** may be fitted with a mast rotator of optional material.

F.3.2 DIMENSIONS

- (a) The following dimension limits shall apply:

	Maximum
Mast spar circumference	385 mm
Distance between upper point and top of front beam	9100 mm
Shroud height	6750 mm
Gennaker hoist height	8150 mm
Distance between Mast Datum Point and top of front beam	120 mm
Distance between Mast Datum Point from above where the mast shall be watertight	450 mm

F.3.3 FITTINGS

- (a) MANDATORY

- 1. Hounds fittings

F.4 BOOM

F.4.1 CONSTRUCTION

- (a) The **boom**, if fitted, shall be made of an extruded aluminium profile of constant section.
- (b) A gooseneck may be fitted.

F.5 BOWSPRIT

F.5.1 CONSTRUCTION

- (a) The **bowsprit** shall be made of an extruded aluminium profile of constant section.

International Formula 18 Class Rules 2018

NED proposal #2-8, WC meeting Denmark July 2017 v.18052017

Verwijderd: 1

- (b) The **bowsprit** shall be fixed in a fore and aft position.
- (c) The **bowsprit** shall be attached to the front beam and, with bridle wires, to the **hulls**.
- (d) The **bowsprit** shall be fitted with an end cap at the front that is smooth, rounded and blunt, of optional material.
- (e) The **bowsprit** may be fitted with a gennaker retrieval system. The materials of this system are optional, except for carbon fibre.

F.5.2 DIMENSIONS

- (a) The length of the **bowsprit** shall not exceed the distance from the centre at the front side of the front beam to a vertical line touching the most forward part of the **hull** plus 800 mm, with the **bowsprit** measured when horizontal (see Appendix A).

F.5.3 FITTINGS

(a) MANDATORY

1. Front beam and bowsprit bridle attachment fittings

F.6 STANDING RIGGING

F.6.1 MANDATORY

- (a) **Forestay**
- (b) Forestay bridles
- (c) **Shrouds**
- (d) Bowsprit bridles

F.6.2 OPTIONAL

- (a) Diamond stays and spreaders

F.6.3 MATERIALS

- (a) The **standing rigging** shall be of stainless steel, with the exception of the bowsprit bridles which may be of rope.
- (b) The material of the spreaders, if fitted, is optional.

F.6.4 CONSTRUCTION AND DIMENSIONS

- (a) The **forestay**, forestay bridles, **shrouds** and, if fitted, diamond stays shall be of 1×19 or 1×7 stranded wire of minimum diameter 4 mm.

International Formula 18 Class Rules 2018

- (b) The bowsprit bridles, if made of rope, shall be of minimum diameter 2.5 mm.
- (c) Forestay, shroud and, if fitted, diamond stay tension adjustment devices are permitted.

F.7 **RUNNING RIGGING**

F.7.1 MANDATORY

1. Mainsail halyard
2. Mainsail sheet
3. Jib halyard
4. Jib sheet
5. Gennaker halyard/tack and retrieving line(s)
6. Gennaker sheet

F.7.2 OPTIONAL

1. Mast adjustments
2. Other sail adjustments

F.7.3 MATERIALS

- (a) Materials are optional.

F.8 **OTHER RIGGING**

F.8.1 MANDATORY

- (a) Four (4) **trapezes**

F.8.2 MATERIALS, CONSTRUCTION AND DIMENSION

- (a) The **trapezes** shall be of stranded stainless steel wire or rope of minimum diameter 2.5 mm.

Section G – Sails

G.1 **PARTS**

G.1.1 MANDATORY

- (a) **Mainsail**
- (b) Jib
- (c) Gennaker

G.2 GENERAL

G.2.1 IDENTIFICATION

- (a) The **sails** shall have labels completed by the sailmaker and placed near the **tack point** with name of manufacturer, materials used, date of manufacture and serial number, indelibly marked (see Appendix A).

G.2.2 DEFINITIONS

- (a) Large Jib: a jib which is not a Small Jib and which has a maximum area of 4.15 m²
- (b) Small Jib: a jib with a maximum area of 3.45 m²
- (c) Large Gennaker: a gennaker which is not a Small Gennaker and which has a maximum area of 21.00 m²
- (d) Small Gennaker: a gennaker with a maximum area of 19.00 m²

G.2.3 SAILMAKERS

- (a) Manufacturing without a WS or IF18CA licence is allowed.

G.3 MAINSAIL

G.3.1 IDENTIFICATION

- (a) The class insignia shall conform with the dimensions and requirements as detailed and be placed in accordance with the diagram contained in Appendix A.

G.3.2 MATERIALS

- (a) The **ply**, primary reinforcements, secondary reinforcements and **window** shall be of material listed in the updated cloth list (see [REFERENCE]).
- (b) Materials for the **stiffening** are optional, except carbon fibre.

G.3.3 CONSTRUCTION

- (a) The construction shall be **soft sail, single-ply sail**.
- (b) The **body of the sail** shall consist of the same **ply** throughout, with the exception of the **window** which may be different.

International Formula 18 Class Rules 2018

- (c) The following are permitted: stitching, glues, tapes, **stiffening** with fixings, **batten pocket patches**, batten pocket elastic, batten pocket end caps, corner eyes, bolt ropes, mast slides, cunningham eye or pulley, reefing points, leech line with cleat, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable *rules*.
- (d) The number of **batten pockets** is optional.
- (e) The **sail** shall be loose footed.
- (f) **Sails** shall have one **window** placed in the lower third of the **sail**.

G.3.4 DIMENSIONS

- (a) The following dimension limits shall apply (see Appendix A):

	Minimum	Maximum
Sail area (including the area of the half perimeter of the mast spar)		17.00 m ²
Top width , excluding bolt rope		1000 mm
Upper width at upper leech point 1500 mm from head point		1290 mm
Angle between the luff and the head		90°
Tabling width		115 mm
Window area	0.80 m ²	

G.4 JIB

G.4.1 MATERIALS

- (a) The **ply**, primary reinforcements, secondary reinforcements and **window** shall be of material listed in the updated cloth list (see [REFERENCE]).
- (b) Materials for the **stiffening** are optional, except carbon fibre.

G.4.2 CONSTRUCTION

- (a) The construction shall be **soft sail, single-ply sail**.
- (b) The **body of the sail** shall consist of the same **ply** throughout, with the exception of the **window** which may be different.
- (c) The following are permitted: stitching, glues, tapes, **stiffening** with fixings, **batten pocket patches**, batten pocket elastic, batten pocket end caps, corner eyes, cunningham eye or pulley, zips, Velcro and sleeve luffs, leech line with cleat, tell tales and items as permitted or prescribed by other applicable *rules*.
- (d) The number of batten pockets is optional.
- (e) The **leech** shall not be convex.

Verwijderd: jib may have a maximum of three (3) full length battens, which shall have no moving parts and be made of glass fibre

Verwijderd: 1

(f) **Sails** shall have one **window** placed in the lower third of the **sail**.

G.4.3 DIMENSIONS

(a) The following dimension limits shall apply (see Appendix A):

	Minimum	Maximum
Sail area	See G.2.2(a) and (b)	
Top width		50 mm
Tabling width		115 mm
Window area	0.30 m2	

G.5 GENNAKER

G.5.1 MATERIALS

- (a) The **ply**, primary reinforcements and secondary reinforcements shall be of material listed in the updated cloth list (see [REFERENCE]).
- (b) Tapes shall be of polyester or spectra.

G.5.2 CONSTRUCTION

- (a) The construction shall be **soft sail, single ply sail**.
- (b) The **body of the sail** shall consist of the same **ply** throughout.
- (c) The following are permitted: stitching, glues, tapes, corner eyes or rings, recovery line eyes or rings, tell tales, **leech** and **luff** lines and items as permitted or prescribed by other applicable *rules*.
- (d) **Primary and secondary reinforcement** is permitted at the **sail corners** and the recovery points.

G.5.3 DIMENSIONS

(a) The following dimension limits shall apply (see Appendix A):

	Minimum	Maximum
Sail area	See G.2.2(c) and (d)	
Ratio of half width / foot length	75 %	

APPENDIX A CLASS DRAWINGS

D.4.2	BEAMS	curvature
D.6.2	ASSEMBLED HULLS	hull length; boat beam
F.2.2/F.3.2	MAST	Mast Datum Point; dimensions
F.5.2	BOWSPRIT	dimensions, length
G.2.2/G.3.1	IDENTIFICATION	location labels, class insignia
G.3.4	MAINSAIL	dimensions; area calculation
G.4.4	JIB	dimensions; area calculation
G.5.3	GENNAKER	dimensions; area calculation

Verwijderd: B.2.1 - CERTIFICATION MARKS - association stickers .

Verwijderd: 1

B.2 CERTIFICATION MARKS

B.2.1 Valid association stickers shall be affixed to the **hulls, daggerboards, rudders, mast** and **sails** in the required positions (see Appendix A).

E.4.4 WEIGHTS

The minimum weight of each rudder assembly comprising blade, stock with fittings and tiller is 3 kg.