



Quick links to online forms and docs: | [Repair & Maintenance](#) | [OD Certificates](#) |

## Appendix C – Latest revisions Log

*Latest revision: 15 Dec 2010.*

1. Class Authority change
- 3.1 Weighing conditions changed
- 3.2 Addition of compression tubes
- 3.3 New daggerboard weight tolerance
- 3.9 Running rigging restrictions removed
- 3.10 New sails quota introduced
5. Additional mandatory safety equipment
8. Increase in One-Design Certificate fee

# EXTREME 40 CLASS RULES

## INTRODUCTION

1. AUTHORITY AND FUNDAMENTAL RULES
2. ELIGIBILITY AND COMPLIANCE
3. EQUIPMENT, WEIGHT, REPLACEMENT AND REPAIR
  - 3.1 Weight
  - 3.2 Hulls
  - 3.3 Deck Gear
  - 3.4 Daggerboards
  - 3.5 Rudders
  - 3.6 Mast & Boom
  - 3.7 Gennaker Pole
  - 3.8 Standing Rigging
  - 3.9 Running Rigging
  - 3.10 Sails
  - 3.11 Measurements
  - 3.12 Disputes
4. CREW, PASSENGERS AND SAFETY
5. AUXILIARY EQUIPMENT
6. CLASS INSIGNIA AND ADVERTISING
7. CONFERENCE
8. ANNUAL ONE DESIGN CONTROL FEE.
9. SUSPENSION AND WITHDRAWAL.
10. DISCLAIMER

Appendix A. Weighing.

Appendix B. Line measurements checklist.

Appendix C. Latest revisions Log.

Appendix D. Reserved for future use.

Appendix E. Reserved for future use

Appendix F. Repair and maintenance approval form.

Appendix G. Extreme 40 Class insignia.

Appendix H. Extreme Sailing Series “X” insignia



## INTRODUCTION

The Extreme 40 is a strictly standardised one-design class where the true test is between crews and not between boats and equipment. The Extreme 40 is intended to provide a platform for competition in which every team has equal opportunity to win. Its manufacturing, measurement and design data are classified. The Extreme 40 is intended to sail coastal and Grand Prix short course races.

### 1. AUTHORITY AND FUNDAMENTAL RULES

- (a) These Class Rules are closed and manufacturing controlled rules. Unless otherwise permitted by these rules, **the Extreme 40 shall be raced in all respects as originally supplied by the manufacturing license holders<sup>1</sup>**. It shall be the intention of the Class Authority ensure that Extreme 40's are as identical as feasible in all possible aspects. **Anything not specifically permitted by these rules is prohibited.**
- (b) The international authority of the class (Class Authority) is Extreme Sailing Series S.A., which shall operate in all matters concerning these class rules. The Class Authority will be represented by one or more duly appointed class measurers and other representatives.
- (c) Extreme Sailing Series S.A. shall designate an Organising Authority which shall have the responsibility to elect the Race Committee.
- (d) RRS 42 shall apply as amended below:
  - RRS 42.3 is changed as follows:
    - (i) A boat's crew may pump the mainsail repeatedly to release one or more battens.
    - (j) A boat maybe sculled if the sculling does not propel the boat.

### 2. ELEGIBILITY AND COMPLIANCE

- (a) For an Extreme 40 to be eligible for racing, it shall comply with these Class Rules. Compliance with these Rules and their interpretation and amendments shall be determined by the Class Authority. Interpretations shall be final and binding and may be published on the class website [www.extreme40.org](http://www.extreme40.org) when appropriate.
- (b) An Extreme 40 must have a current and valid class certificate to be eligible for racing.
- (c) The official language of the Extreme 40 Class is English.

### 3. EQUIPMENT, WEIGHT, REPLACEMENT AND REPAIR

Maintenance, replacement, modification and repairs -including but not limited to painting and sanding- require the prior written approval of the Class Authority<sup>2</sup>, and shall restore and maintain class rule compliance. (see also CR 5.2 and 3.9). Retrospective approval may only be given if repair or replacement is due to accidental loss or damage whilst racing and carried out from the first scheduled race until the end of racing on the final day of a regatta. Such damage, loss, repair or replacement shall be reported without any delay to:

---

<sup>1</sup> \*for boats # 1-19 license holder is Tornado Sport, for boats # 20 onwards license holder is Extreme Sailing Series S.A.

<sup>2</sup> See Appendix F on how to apply for repair and maintenance approval. Or click [here](#) to get the online application form.



- i. the Race Committee and Class Measurer (in order to check class rule compliance and corrector weight aspects of the repaired or replaced equipment).
- ii. the Class Authority (as required by Appendix F).

### 3.1 Weight

- (a) At each official Extreme 40 class regatta the heaviest recorded weight of the competing boats shall be deemed to be the established minimum weight for the event and all boats, of a lighter weight, shall have corrector weights fitted to comply with the established minimum weight. Corrector weight data for each competing boat may be published by the Class Authority.
- (b) For complete boat weighing, the Extreme 40 shall be equipped as specified in Appendix A.
- (c) Individual components for each boat shall be weighed and shall be equipped as specified in Appendix A. If a component is damaged and repaired in accordance with CR3, the recorded weight of the boat shall be adjusted by an amount equal to the change in weight of the repaired component.
- (d) Standardised corrector weights of lead -as supplied by the Class Authority- shall be equally divided, clearly visible and securely fastened to the main part of the front and aft beam. When the allotted weight is an odd number of kilos the heavier division<sup>3</sup> shall be fastened to the front beam.
- (e) The method of fastening the corrector weights is optional, provided that the weights are readily adaptable and removable. The weight of materials used to fasten the corrector weights shall not be included in the corrector weight calculation.
- (f) Corrector weights shall not be tampered with or removed, during the course of the regatta, without the express permission of the Class Authority.

### 3.2 Hulls

- (a) Hulls may be stickered and signed for promotional purposes.
- (b) All 4 circular cockpit drainage holes shall have the same diameter, which shall not be more than 55 mm.
- (c) In order to adapt the winch platform to the winch drum diameter, an optional standardised winch platform modification laminate may be applied. This laminate shall not alter the original position of the winch. Laminate and application specifications shall be as obtained from the Class Authority.
- (d) Additional compression tubes may be added inside either forward or aft beam. The beam bolts shall pass through such a tube axially and it shall be made of carbon-fibre reinforced plastic with a wall thickness of no more than 5mm.

### 3.3 Basic Deck Gear

- (a) The gennaker furler is allowed to be tied to the pole-bridle end Cap.

### 3.4 Daggerboards

- (a) Each daggerboard shall weigh 27kgs with a tolerance of +/- 1 kg.

---

<sup>3</sup> Division example: total 13 kg. = 7 on front beam and 6 on aft beam.



- (b) Daggerboards constructed before 1<sup>st</sup> November 2010 shall be grandfathered if they meet the minimum weight requirement. Removal of ballast from grandfathered daggerboards shall be permitted in accordance with CR 3, provided carbon material is not removed. No ballast shall be added to grandfathered daggerboards.
- (c) Refinishing of daggerboards is allowed, provided the overall shape shall not vary from the original master. (see also CR 1.)
- (d) No part of the upper edge of a daggerboard shall be lower than the upper edges of its daggerboard slot.
- (e) In order to obtain snug fitting of the daggerboards into the daggerboard slots, strips (or tape) of material may be permanently fixed within 70 mm of the upper and lower edges of the daggerboard slots.
- (f) The angle of incidence, attack or rake of a daggerboard may not be adjusted or altered whilst racing.

### 3.5 Rudders

- (a) Each assembled rudder shall weigh not less than 13.0 kg.
- (b) Refinishing of the rudder blades is allowed provided the overall shape shall not vary from the original master. (see also CR 1.)
- (c) The position and rake of the rudders relative to the hulls shall not be altered beyond the existing fine tune possibilities.
- (d) One permanently fixed non-metallic fender-pad may be used at the forward lower inner edge of each rudder head. Such fender-pad shall be square and its uniform thickness shall not be more than 6 mm. The color of the fender-pad shall clearly differ from the rudder head.
- (e) In order to secure a fixed rudder rake, one additional hole and one securing pin in each rudderhead, and one corresponding hole in each rudder blade may be used. The diameter of the pins and holes shall not be more than 7 mm.
- (f) Material and construction of the tiller extensions are optional.
- (g) Additional carbon laminate may be used to reinforce the bond between the upper and lower rudder gudgeons and the rudder case. A maximum of 2 layers of cloth may be used, lapping shall be no more than 100mm on to the rudder case.

### 3.6 Mast & Boom

- (a) The top and lower mast spar sections shall be fully inserted and fastened as originally supplied.
- (b) Until 31 December 2012, both boom versions (2005-07 or 2008) may be used.
- (c) Additional carbon fibre laminate may be added to the exterior surface of the sleeve section of the mast top section to eliminate any play in the join.

### 3.7 Gennaker Pole

- (a) The gennaker pole shall be rigged in a fore and aft position and attached to the centre of the main beam at the inboard end. The outboard end shall be attached to 2 bridle rods connected to each bow and rigged along the fore and aft centerline.

### 3.8 Standing Rigging



- (a) The standing rigging consists of 2 aramid side stays, 1 S/S rod forestay x 8mm minimum diameter, 2 forestay bridle rods of 8mm minimum diameter, 2 diamond rods of 8mm minimum diameter, and 2 pole bridle rods of 7mm minimum diameter. Replacements shall be sourced from the Class Authority .
- (b) The mast rake shall remain unaltered whilst racing.

### 3.9 Running Rigging

- (a) Replacement of sheets, halyards and other control lines shall be in compliance with Appendix B. Further to CR3, these replacements do not require prior approval from the Class Authority.
- (b) Halyards, sheets and control lines shall be rigged in their original and readily operational position.

### 3.10 Sails

- (a) Mainsails, jibs and gennakers shall be approved by the Class Authority and shall be built by North Sails France.
- (b) After January 1<sup>st</sup> 2011, an Extreme 40 shall have a registered sail inventory which shall comprise:
  - i. 1 x mainsail (supplied after 1<sup>st</sup> November 2010)
  - ii. 2 x jibs (supplied after 2006)
  - iii. 2 x gennakers (supplied after 2006)
  - iv. 1 x storm jib
- (c) In the case of irreparable damage to a sail, a request for replacement must be made to the Class Authority, who may permit the sail to be replaced after considering the circumstances in which the damage was caused<sup>4</sup>. If a mainsail is damaged irreparably, its replacement shall not be a brand new sail, and shall be approved for use by the Class Authority.
- (d) Repairs made to sails are permitted in accordance with CR 3. The Class Authority may decide to check any sail against sails from other boats to control one design compliance (see also CR3.12)
- (e) Sails may be stickered, signed and coloured for promotional purposes.
- (f) No part of the mainsail -projected perpendicular to the back face of the mast spar- shall extend beyond the upper edge of the top mast spar section.
- (g) After June 1, 2010 only FiberFoam sail battens shall be used in the mainsail. Only the length of these battens may be shortened to suit its batten pocket. Such shortening shall only be done at the thickest end of the battens. Further to CR 1.(a) and 3 any other finishing or modifications to the battens are prohibited. (see also CR 6.f )
- (h) FiberFoam battens or Bluestreak battens may be used in the jib. Only the length of these battens may be shortened to suit its batten pocket. Such shortening shall only be done at the thickest end of the battens. Each jib shall be registered specifying which type of batten shall be used. Further to CR 1.(a) and 3 any other finishing or modifications to the battens are prohibited. (see also CR 6.f )

---

<sup>4</sup> In 2011, a boat shall register a maximum of 2 jibs and 2 gennakers supplied after 1<sup>st</sup> November 2010.



### 3.11 Measurements

Measurements shall be taken in units of the metric system. Measurements shall be rounded to the nearest mm. Weights shall be rounded to the nearest 0.1 kg, unless otherwise stated. The weight of the complete boat shall be rounded to the nearest kg.

### 3.12 Disputes

In the event of a dispute alleging non-compliance with these Class Rules, where specific dimensions are not stated, the following procedure shall be followed:

A sample of the dimensions for the disputed item shall be obtained by taking the identical measurement from 3 boats or items of equipment, which are not the subject of the dispute; the dimension(s) of the disputed boat or items of its equipment taken using the same method as above shall be compared to the sample.

If any of the dimensions obtained from the disputed boat or item of equipment lie outside the corresponding range of dimensions found in the sample, the matter together with the details of the measurement methods shall be referred to the Class Authority.

## 4. CREW, PASSENGERS AND SAFETY

- (a) Unless otherwise stated in the NOR, The Extreme 40 shall be raced with a crew of four active people, In the case of an all female crew one extra female crew is allowed. The number of crew during a regatta shall not be changed.
- (b) Each member of crew for an Extreme 40 shall be registered with the Organising Authority at each regatta and the crew members shall remain the same for each race during a regatta, unless dispensation is given by the Organising Authority prior to the new crew member participating in a race.
- (c) On sponsored races and regattas provision may be made for 1 or 2 passengers following a race on board (VIP guests), provided that all competing boats shall have the same number of passengers on board. Skippers shall ensure that such passengers shall:
  - i. have the express prior approval from the Organising Authority to follow races on board if he/she could be considered as an experienced regatta sailor.
  - ii. not contribute to the racing and performance of the boat other than to move position as required by the skipper and not protrude his/her body outside the vertical projection of a rectangle formed by aft edge of the aft beam, forward edge of the forward beam and outer edges of hulls.
  - iii. wear a CE certified buoyancy aid with a minimum specification of EN 393:1993 (CE 50 Newtons)
- (d) The Organising Authority may assign specific sponsored races as being not subject to be followed on board by passengers.
- (e) There shall be sufficient buoyancy aids with a minimum specification of EN 393:1993 (CE 50 Newtons) on board for everyone on the boat.
- (f) Extreme 40s are deemed to be 'off the beach' cats as under ISAF guidelines.
- (g) No clothing or equipment shall be worn with the specific feature of adding weight by water or holding water in pockets, compartments, containers or any other method.
- (h) Each crew shall carry a personal knife at all times whilst on board.



## 5. AUXILIARY EQUIPMENT

The following equipment may be obtained from any supplier, unless otherwise stated.

### 5.1 Mandatory Equipment

- (a) Two fully functioning, waterproof, marine VHF radios with access to the channels specified by the Race Officer.
- (b) First aid kit in waterproof container or bag.
- (c) On each boat, two safety knives shall be fastened on top of the trampoline and two safety knives shall be fastened underneath the trampoline, all in the vicinity of the primary winches.
- (d) Boats shall have 2 righting lines installed at each fwd beam/hull intersection. Righting lines shall be made from Dyneema of minimum length 20 metres and minimum core diameter 8mm . One end shall be spliced and cow hitched to the forward beam, located near the hull. The free end shall have an opening splice with a minimum 500mm tail bury. The free end shall be fastened at the forward beam intersection with the opposite hull, and the length fastened with cable ties to the underside of the trampoline.

### 5.2 Optional Equipment and Arrangements

- (a) Electronic Instruments such as compass and timing device or combination of both may be fitted. If fitted, these instruments shall only provide information relating to a boat's heading and current or elapsed time respectively. Unless specifically permitted by the Organising Authority all GPS devices, plotters, phones and other internet enabled devices, are prohibited.
- (b) A mechanical wind indicator is permitted.
- (c) Tell tales may be added to any part of the jib, gennaker, mainsail or rig.
- (d) The use of additional small cleats, winch override blocks, plastic or stainless steel rings, bobbles, flexible adhesive tape, Velcro or shock cord is optional. These materials and fittings shall not be used:
  - i. If these could be considered as modifying the intended purpose or action of any equipment.
  - ii. At rudder blades, daggerboards and daggerboard slots. (see also CR 3.4 (d))
  - iii. At the hulls below the designed waterline.
- (e) The method of attaching the supplied halyards and sheet arrangements to the boom, main sail, jib and gennaker is optional. Provided that such attachment shall not be longer than 100 mm.
- (f) Further removable storage for equipment, food, water etc. may be added. None of the original supplied bags shall be removed or moved.
- (g) Replacements of fasteners with alternatives of the same specifications from any supplier are permitted.

## 6. CLASS INSIGNIA, ADVERTISING, MEASUREMENT MARKS

- (a) The forward 20% of each hull on both the inside and outside surfaces, shall only display advertising chosen and required to be displayed by the Organising Authority.



- (b) For specific regattas Extreme 40 owners/teams shall acknowledge that the jib is reserved for event sponsorship when supplied by an Organising Authority. The Notice of Race may contain additional requirements for race flags, and other branding as required by the Organising Authority.
- (c) The Extreme 40 class insignia, including any possible class sponsor exposure, shall be not less than 1.7m high, excluding any background, and scaled for width accordingly. It shall be displayed on both sides of the mainsail and placed back to back wholly within the top 25% of the mainsail (see attached diagram). For boats competing in the Extreme Sailing Series 2011, the Extreme 40 Class insignia shall be replaced by the Extreme Sailing Series "X" logo, not less than 1.7m high .
- (d) One set of logos (either Extreme 40 Class insignia or Extreme Sailing Series "X" logo) shall be provided by North Sails France per new mainsail. Additional sets of logos shall be at Owner's cost.
- (e) The Class Authority - using ISAF Advertising Code, Category C as a possible guideline - may reject any advertising on a boat.
- (f) Any event, manufacturer's or measurement identification marks (buttons, labels, stickers, stamps etc.) shall remain undamaged and clearly legible and shall not be moved, replaced or re-varnished. Marks rendered damaged or not clearly legible renders the equipment class illegal and shall be reported<sup>5</sup> to the class measurer without any delay.

## 7. CONFERENCE

It is envisaged that the Class Authority may organise Extreme 40 owners/teams conferences or forums to facilitate discussion of matters of common interest.

## 8. ANNUAL ONE DESIGN CONTROL FEE

Each Extreme 40 owner shall have a valid online One Design Certificate for his/her boat. An annual one design control fee shall be payable for each boat to the Class Authority. This will issue an online One Design Certificate for the respective calendar year. The one design control fee for 2011 shall be €1600. Change of ownership will invalidate a boat's One Design Certificate and the new owner may apply for a new certificate. An additional fee of €200 per component shall apply for certification or re-certification of individual components due to repair or replacement in accordance with CR3.

Click [here](#) to check the current status of an online One Design Certificate.

## 9. INVALIDATION AND WITHDRAWAL

For violation of these Rules and/or non-compliance with the directions of the Class Authority, the Class Authority may withdraw or invalidate a boat's One Design Certificate. The re-validation fee for such invalidated certificate shall be €500 and will increase progressively with each next re-validation of the same certificate (€500 >> €1000 >> €2000 etc.).

---

<sup>5</sup> E-mail + picture attached, to: [chiefmeasurer@extreme40.org](mailto:chiefmeasurer@extreme40.org)



#### 10. DISCLAIMER

No legal responsibility with respect to these class rules, or accuracy of measurement, rests with the Class Authority, Extreme Sailing Series S.A., their employees, agents and representatives. No claim arising from these class rules can be entertained.



## Appendix A – Weight

**For all weighing procedures components shall be dry and shall not have any additional materials intended to disrupt the weight correction process.**

The complete boat shall be weighed by the Class Authority with the following equipment on board:

1. Rudders, rudder heads and tiller gear
2. All registered sails including battens, excluding storm jib (1 mainsail, 2 jibs and 2 gennakers)
3. Standing and running rigging<sup>1</sup>.
4. Mast, boom and gennaker pole.
5. Any fixture or fitting permanently attached to the boat.
6. Trampolines

The following equipment shall not be on board for the purposes of weighing the complete boat:

1. Daggerboards
2. Extra ropes, lines or sheets not normally used whilst racing.
3. Storm jib
4. Buoyancy Aids.
5. Any personal crew equipment.
6. Any further equipment that may be removed. E.g. first aid kit, water bottles, storages, vhf radio, electronic compasses etc.
7. Any equipment that the Class Authority deems inappropriate.

Individual components, equipment and sails shall be weighed by the Class Authority and shall be taken as follows:

1. Hulls with winches and all permanently fixed fittings and arrangements
2. Aft Beam without trampoline.
3. Forward beam with jib traveller system and all permanently fixed fittings
4. Mainsail with battens
5. Jibs with battens
6. Gennakers with furling rope
7. Mast with spreaders and standing and running rigging<sup>1</sup>.

---

<sup>1</sup> for the avoidance of doubt - the running rigging used for measurement shall be the same specification as the running rigging used during the course of the regatta



## Appendix B – Line measurements checklist

Item	Sheets	Core	Cover	Minimum diameter at 50kg load	Length* at 50kg load	Purchase	Stripping
1	Gennaker sheet	Dyneema	-	10mm	-	1:1	1m
2	Jib sheets to winch	Dyneema	-	8mm	-	1:1	no stripping
3	Jib sheet to sail	Dyneema	none	5mm	-	1:1	N/A
4	Mainsheet control line	Dyneema	none	10mm	-	1:1	N/A
<b>Halyards</b>							
5	Mainsail halyard	Dyneema	-	8mm***	62m	1:2	0.15m
6	Mainsail halyard jammer trip line	Dyneema	none	3.5mm	37m	1:1	N/A
7	Jib halyard	Dyneema	-	8mm	46.5m	1:2	no stripping
8	Gennaker halyard	Dyneema	-	10mm	36m	1:1	14m
9	Man halyard line	Dyneema	-	6mm	40m	1:1	no stripping
<b>Controls</b>							
10	Traveler control line	Dyneema	-	8mm	-	1:2	3.5m at each end**
11	Cunningham haul line	Dyneema	none	6mm	-	1:1	N/A
12	Sidestays top lashing line	Dyneema	none	5mm	-	-	N/A
13	Sidestays bottom lashing line	Dyneema	none	5mm	-	-	N/A
14	Headstay top lashing line	Dyneema	none	5mm	-	-	N/A
15	Headstay bottom lashing line	Dyneema	none	5mm	-	-	N/A
16	Spi-pole bridle lashing line	Dyneema	none	5mm	-	-	N/A
17	Mid spi-pole bridle line	Dyneema	none	3.5mm	-	-	N/A
18	Bridle lashing line	Dyneema	none	5mm	-	-	N/A
19	Gennaker furling line	-	-	8mm	-	1:1	N/A
20	Spanner adjustment line	Dyneema	-	6mm	-	1:4	no stripping
21	Dagger board hoist line	Dyneema	-	10mm	-	1:1	no stripping
22	Rudder blade lift line/webbing**	-	-	-	-	-	no stripping
23	Trampoline tensioning line	-	none	4mm	-	-	N/A
24	Righting line	Dyneema	none	8mm	20m	1:1	N/A

- = material not specified.

\* = subject to +/-2% tolerance

\*\* = optional

\*\*\* = optional inserts may be used at hoist and reef points to enhance jammer grip.



## **Appendix C – Revisions Log**

Revisions 15/12/10

1. Class Authority change
- 3.1 Weighing conditions changed
- 3.2 Addition of compression tubes
- 3.3 New daggerboard weight tolerance
- 3.9 Running rigging restrictions removed
- 3.10 New sails quota introduced
5. Additional mandatory safety equipment
8. Increase in One-Design Certificate fee

## **Appendix D – Reserved for future use**

## **Appendix E – Reserved for future use**



## Appendix F – Repair, Replacement and Maintenance approval Form

Further to CR 3. this request is to be submitted to the Class Authority in order to obtain their **prior written** approval **before** any repair, replacement, modification or maintenance will be carried out. A clear sharp and close up photo reportage showing the relevant boat or equipment details before repair or maintenance commences, **shall** be send by a separate e-mail. (mail pictures to: chiefmeasurer@extreme40.org. Mail title: Repair approval request, date, team.)

Click [here](#) to get the online Repair, Replacement, Modification and Maintenance Form.

The online application form **and** its related above mentioned e-mail, is the sole class legal procedure to apply for the above mentioned approval.

End of Appendix F



Appendix G - EXTREME 40 CLASS INSIGNIA





## APPENDIX H - EXTREME SAILING SERIES "X" INSIGNIA

(depicted on a grey background to show extents of logo)



END OF CLASS RULES and their INTEGRAL APPENDICES