

NACRA

Measurement Guide

This guide is to be used to assist Nacra Measurers in implementing the Nacra Class Rules. And by Nacra owners and competitors to ensure compliance with the Nacra Class Rules.

NACRA Class Catamarans are each a one designed Manufacturers class.

The measurement guide (MG) should be read in conjunction with the NACRA Class Rules for Australia.

Please remember these rules and guides are closed Class Rules where if it does not specifically say that you may- then you shall not.

Owners and crews should be aware that compliance with the rules is the responsibility of the competitor.

Special attention is drawn to all measurers, reference Nacra Class Rules A.9, all strictly controlled items are to be manufacturer supplied and particularly Class Rule A.9.2 “All Nacra equipment for use on boats competing in NACRA class events being sailed in Australia shall be purchased from Nacra Australia (NA) (Marine Importing and Manufacturing Pty Ltd, trading as Brisbane Catamaran Centre) and its appointed dealers, expect where otherwise authorized by these class rules.”

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Notes for the Measurer

Throughout this guide are inspection notes to highlight checks that should be made periodically of boats competing at Nacra regattas. Reference to Nacra Class Rules (NCR) are shown.

Items that should be checked at all Nacra Association sanctioned events are as follows:

a) Sails and battens

In particular a Sail that has signs of repair, without supporting information from the repairing sail maker should, at the measurer's discretion, be classified as **altered** under NCR C.11.

Repairs that change the characteristics of any one sail are not allowed.

ie.: replacement of leech panels in jibs, or top panels in mainsails. A sailor should check with the Class Measurer or Class sail Manufacturer before any major sail repair.

A sail with repairs without supporting information, should only pass if the Measurer is certain that no alteration of shape has occurred. In addition, the Measurer should advise the owner of the Class requirements and that all attempts should be made to satisfy those requirements at further regattas.

b) Crew weights (where applicable)

All crews in classes with minimum crew weights NCR C.2.2 should be weighed at registration.

Crews at or near minimum weight should be checked, without notice, at least twice during a regatta. Crews carrying corrector weights NCR C.2.3 should have the weights and placement checked during the regatta.

c) Safety equipment

The class rules are very clear on the safety requirements of the class.

These items should be checked at random, without notice, during a regatta to ensure competitors compliance at all times.

In addition, measurers are encouraged to including checking of righting lines NCR C.5.1 during the measurement process, ie.: at the same time sails are measured.

Note under boat systems not meeting the class rule with ropes less than 10mm in diameter and less than 4.5 metres in length shall still require a class legal righting line as per NCR C.5.1. ie.: The under boat system may remain, but a class legal righting line will also be carried.

d) General Notes

- Hulls:
1. All Hulls, daggerboards and rudders are "Nacra Production products"
 2. Hulls may also be faired as this option is available from the manufacturers.
 3. NCR C.7.1 Two foot straps maybe fitted to each hull.

Rudder Gudgeons: 1. Four types of Gudgeons have been used and are class legal.

Daggerboards: 1. Hand holes have been fitted to all types of Nacra daggerboards.
2. Early 5.2, 16sq and 18sq had no hand holes and **flatter** style of boards.
3. Infusion Mk2 boards may be fitted to Mk1 boats.

Rudders: 1. Only Nacra types designed and fitted by the manufacturer are class legal on the model to which they are fitted.
2. Nacra Sirocco, 4.5, 14sq, 16sq, 5.5, I17 and 5.8 can be fitted with the short rudder or the deep rudder.
3. Nacra Sirocco, 350, 4.5 can be fitted with shallow draft rudders.
4. Early 5.2 and 18sq had wider and more bulbous type rudders.
5. Rudder castings may not be lightened.

Spars: 1. All spars are Nacra Production.
2. All sections are exclusive to Nacra.
3. Other than Nacra 350, F16, N15, N17, Infusion, F18, Evolution and I17 all other Australian Mast sections, the outer shape is common to all.
4. The 5.8, 5.7, 5.5 section incorporates internal track and has heavier walls. All other Nacra boats use Nacra 18sq sections.

Inspection note: Attention should be made that wire halyards and locks are not used on masts that are made to accommodate ring halyard locks.

Diamond Tangs: 1. The top position has been moved over the years from the side. As on the early 18sq, 5.2 to the front as per factory drawing.

Spreaders: 1. Nacra 350, Sirocco, 430, 14sq, 4.5 are not fitted with spreaders.
2. Nacra 5.0, 5.2, 16sq that were fitted with straight through spreaders (tube type) all may be fitted with adjustable rake spreaders. Special rear arms are available to allow adjustment to match the straight through spreaders.
Standard rear arms are 325mm and the special rear arms are 353mm
3. Special rear arms are not to be fitted to any other models.
4. Wing type spreaders have been introduced and may be fitted to all models that are designed with mast spreaders.

Standard wing length, 405mm

F18, Infusion, Evolution wing length 465mm

Booms: 1. Booms are fitted to 5.2, 18sq, Infusion, F16, F18, N17, N15.

2. Nacra 5.2, 18sq the boom bale measurement is taken from the gooseneck end. Bale position is as per factory drawing.

Two types of outhaul systems maybe fitted, both internal and external car types/ Both internal and external car section maximum overall measurement is 8' 03 ½ ".

3. Nacra Infusion, Evolution may have curved or straight booms.

Main Beam:

1. Mast ball should not exceed 75mm above beam.
2. Both single and double flute beams can be fitted to all boats fitted with 102mm round beams.
3. Note, some early 14sq had slightly narrower beams.
4. Nacra 4.5 Adventurer's are fitted with front forward beam 64 * 44 mm.

Dolphin striker Straps:

1. Strap size has been increased from 32*9mm aluminium to 40*6mm Aluminium.
2. Infusion and Evolution is fitted with 38*3 mm S/Steel strap.
3. Replacement straps are all now 38*3mm S/Steel.

Bridle Foils:

1. Bridle foil assembly's including extrusion, centre posts, tangs and end caps are not to be altered, including method of attachment to hulls.
2. Nacra 5.5 must be attached using bridle wire 4mm and 432 mm in length.
3. Nacra 5.0, I17, 5.8 must be attached using S/S chain plates 160mm +- 5mm. It is advisable to use Nacra "U" shape chainplates.
4. 4mm Heavy Duty tangs have now been introduced and is recommended, Upgrades can be sourced from NA.
5. 5mm Hamma wire has now been introduced on all bridle foil wires and is recommended, replacements are all the 5mm Hamma style.
6. Minimum wire on all bridle foils is 3/16 *1*19 ss wire.

Rigging:

1. All rigging lengths are measured from bearing points.
2. 14sq, 16sq, 18sq the bridle length shall always exceed the top strop length.
3. Over the years, many boats of the 5.2 and 5.8 classes have turned up with visa-versa bridles, the important guide is that minimum length used in either class is 3' 10 ½ ".
4. All standing rigging on all boats must be 1*19 s/steel rigging.
5. Adjusters on rigging may be chainplate, Sta-master, blue wave or turnbuckle.

Rigging Sizes:

1. Nacra 350, Sirocco, 430, 4.5, 14sq, 16sq is 3.2mm.

2. All other boats is 4mm.

Diamond Wires: 1. Nacra F18, Infusion, Evolution Diamond wires are 4mm
2. All other boats 3.2mm

Trapeze wires: 1. All trapeze wires shall be a minimum of 2.5mm 1*19 S/steel wire on all boats.

Jib Halyards: 1. Jib Halyard shall be 7*19 S/steel wire and a minimum of 2.5mm, except for jib systems that use the hook and ring system.

Bridle Wires: 1. Nacra 350, Sirocco, 430, 4.5, 14sq, 16sq a minimum of 3.2mm 1*19 s/steel wire.
2. All other Nacra boats a minimum of 4mm 1*19 s/steel wire.
3. Except boats with bridle foils where appropriate rules override.

Sails 1. All Nacra sails are "Nacra Production" one design sails.

Inspection note: The manufacturer supplies Australian cut sails for Australian manufactured class's (5.8, 4.5, 14sq, 16sq, 350, 430 Sirocco, 5.0, 5.2, 18sq, 5.5, 5.7, inter 17), this disallows any foreign sails from being used at an Australian Nacra Event unless listed as an exception on the class measurement guides below.

The Infusion, F18, Evolution, F16, N15, N17 can use European "Performance Sails" or Nacra Class Sails , but attention is drawn to Class rule A.9.2 "All Nacra equipment for use on boats being sailed in Australia shall be purchased from NA and its appointed dealers, expect where otherwise authorized by these class rules."

No Alterations or recutting is allowed.

2. All Nacra Sails must carry the logos: see class details for class specific use.

George Manders

NPG

Nacra Class Sail B.C.C.

Flower and Adams

Skip Elliott USA Stamp (early 18sq only)

Performance Sails

Inspection note: It is important to check luff and leech curve for obvious change, restricted and moved from original marks, top panels for recutting on all boats.

Repairs that change the characteristics of the sails is NOT ALLOWED.

Jib luff curve shall not be altered.

New zips maybe fitted; original marks will always remain. When new zips are fitted is the most likely time for curves to be altered. Special attention should be made to ensure that original marks have been used.

Battens: Five class legal battens have been used: see class details for class specific use.

Seaman foam battens

Black magic foam battens

Nacra class batten (permex 20mm)

Aqua batten Blue

Fibrefoam battens

Crew Weights: Only Nacra 5.5, 5.8, F18, Infusion, Evolution has minimum crew weights.

Inspection note: **These classes need crew weigh in at registration.**

Crews at or near minimum weights should be checked, without notice at least twice during a regatta.

Crews under weight should have corrector weights checked, without notice at least twice during a regatta.

Non compliance with the Nacra Class Rules.

When a measurer concludes that a yacht does not comply with the Class Rules or measurement or rating certificate:

- a) Before a race, they shall request the owner or his representative to correct the defect. When the defect is not corrected, he shall report the matter in writing to the race committee, which shall reject or rescind the yachts entry or approve the entry in accordance with the rules. The yacht shall be entitled to a hearing upon request.

- b) After a race, they shall make a report to the race committee or to the protest committee, which shall the notify the yacht concerned and call a hearing.

The measurer shall not have the authority to rescind an entry or to penalise a yacht.

Manufactured Part List: Parts listed below are required to be manufactured by Nacra Europe or Australia and supplied by Nacra Australia known as Brisbane Catamaran Centre trading as Marine Importing and Manufacturing P/L (identified in the class rules as NA)			
Class Rule	Component	Class(s)	Comments
Section D Platform			
D 1.1 (a)	Starboard hull (including deck)	All	
D.1.1 (b)	Port hull	All	
D.1.1 (c)	Front cross beam	All	
D.1.1 (d)	Rear cross beam	All	
D.1.1 (e)	Trampoline	N15, N17	Other classes open
Section E Hull Appendages			
E.1.1 (a)	Starboard Daggerboard	All	
E.1.1 (b)	Port Daggerboard	All	
E.1.1 (c)	Starboard Rudder blade	All	
E.1.1 (d)	Port Rudder blade	All	
E.1.1 (e)	Rudder upper-casting including tiller arm	F18, F16, N15, N17, Infusion	European classes
E.1.1 (f)	Rudder lower-casting	F18, F16, N15, N17, Infusion	European classes
E.1.1 (g)	Rudder casting (one piece)	NC (all Australian classes)	
E.1.1 (h)	Tiller bar	All	
Section F Hull Appendages			
F.1.1 (a)	Mast (includes head and foot)	All	
F.1.1 (b)	Spreaders	All	
F.1.1 (c)	Boom	5.2, 18sq, F18, N17, N15, F16, Infusion	Includes gooseneck
F.1.1 (d)	Bowsprit including snuffer ring	F18, N17, N15, F16, NC, Infusion	Spinnaker pole, includes all Australian classes where used.
F.1.1 (e)	Compression post	N17, N15	
F.1.1 (f)	Spinnaker snuffer bag	N17, N15	
Section G Sails			
G.1.1 (a)	Mainsail	All	
G.1.1 (a) (i)	Mainsail Batten set	All	
G.1.1 (b)	Jib	All	
G.1.1 (b) (i)	Jib Standard batten set	All	
G.1.1 (c)	Gennaker	F18, N17, N15, F16, Infusion, NC spinnaker models	

Special attention is drawn to: Nacra Class Rules A.9, all strictly controlled items are to be manufacturer supplied and particularly NCR A.9.2 “All Nacra equipment for use on boats being sailed in Australia shall be purchased from NA and its appointed dealers, expect where otherwise authorized by these class rules.”

Inspection Note: All Performance sails imported by NA have had the serial numbers recorded to guard against non compliance with NCR A.9.2

Class stickers implemented for all Manufactured and imported products, effective March 2024.

Standing Rigging NCR C.10.6 (Standing rigging may be replaced and shall comply with NCR C.10.6 and the measurement guide)			
Class Rule	Component	Class(s) (all where blank)	Requirement (minimum)
Measurement Guide (MG)	Forestay	350, Sirocco, 430, 4.5, 14sq, 16sq	3.2 mm * 1 * 19 ss wire
MG	Forestay	5.0, 5.2, 5.5, 5.8, F18, F16, 18sq, I17, Infusion,	4.0 mm * 1 * 19 ss wire
NCR C.10.6	Forestay	N15, N17	As per N15, N17 international class rules
MG	Bridle	350, Sirocco, 430, 4.5, 14sq, 16sq,	3.2 mm * 1 * 19 ss wire
MG	Bridle	5.0, 5.8, F18, F16, 18sq, 5.5, 5.2, I17, Infusion	4.0 mm * 1 * 19 ss wire
NCR C.10.6	Bridle	N15, N17	As per N15, N17 international class rules
MG	Bridle foil (and wire)	5.5, 5.0, I17, 5.8	Aluminium foil as supplied by NA. 4 mm * 1 * 19 ss wire 5 mm Hamma wire (upgrade)
MG	Bowsprit Bridle	F18, F16, NC spinnaker models, Infusion	2.5mm * 1 * 19 ss wire
NCR C.10.6	Bowsprit Bridle	N15, N17	As per N15, N17 international class rules
MG	Shrouds	350, Sirocco, 430, 4.5, 14sq, 16sq	3.2 mm * 1 * 19 ss wire
MG	Shrouds	5.0, 5.2, 5.5, 5.8, F18, F16, 18sq, I17, Infusion	4.0 mm * 1 * 19 ss wire
NCR C.10.6	Shrouds	N15, N17	As per N15, N17 international class rules
MG	Diamonds	16sq, 18sq, 5.0, 5.2, 5.5, F16, I17, 5.8	3.2 mm * 1 * 19 ss wire
MG	Diamonds	5.8, F18, Infusion	4.0 mm * 1 * 19 ss wire
NCR C.10.6	Diamonds	N15, N17	As per N15, N17 international class rules
	Forestay adjusters		Chain plate or turnbuckle or Blue wave spanner.
	Side stay adjusters		Chain plate or sta/master or turnbuckle or Blue wave spanner.

Running Rigging NCR C.10.7 (Running rigging may be replaced and shall comply with NCR C.10.7 and the measurement guide)			
Class Rule	Component	Class(s) (all where blank)	Comments
NCR C.10.7	Running rigging	N15, N17	As per N15, N17 international class rules
MG	Trapeze lines	350, Sirocco, 430, 4.5, 14sq, 16sq, 18sq, 5.0, 5.2, 5.5, I17, F16, F18, Infusion	2.5 mm * 1 * 19 ss wire
NCR C.10.6	Trapeze lines	N15, N17	As per N15, N17 international class rules
MG	Jib Halyard	NC models	2.5 mm * 7 * 19 ss wire except models that use the hook and ring system
NCR C.6.1 (d)	Main sheet purchase	F18, Infusion, Evolution	12:1 maximum
		16sq, 5.8	10:1 maximum
		N15, N17, F18	As per N15, N17 international class rules
		350, Sirocco, 430, 4.5, 14sq, 18sq, 5.0, 5.2, 5.5, 5.7, I17	8:1 maximum
NCR C.5.1	Righting line	All Classes	Minimum 10mm thickness and 4.5 meters in Length and shall be fixed to the boat at times while racing.

Measurement Guide – Summary of measurements by class: Nacra F18, Infusion, Evolution			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	Infusion	720 mm
	Front chainplate and tangs (measured from front of front beam)	Infusion	1885 mm
Front Beam	Mast Ball maximum height	All classes	75mm
	Beam length	Infusion	2535 mm
		F18	2545 mm
	Dolphin striker strap measurement	Infusion	1700 mm
		F18	1934 mm
Dolphin striker strap size	Infusion	38 * 3 mm SS	
Rear Beam	Beam length	Infusion	2518 mm
		F18	2510 - 2514 mm
Daggerboard	Type (size) – Infusion Mk11 (long) daggerboards maybe fitted to Mk1 boats.	Infusion	-
Rudder	Type (size) – Evolution Rudder blades maybe fitted to Infusion boats.	Infusion	-
Mast	Section	Infusion + Evolution	159 * 76 mm black
		F18	135 * 76 mm clear
	Length	Infusion + Evolution	9140 mm
		F18	9180 mm
	Hound height	Infusion	6745 mm
		Evolution	???? mm
		F18	6745 mm
	Spreaders – tube type rear arm	All	325 mm
Spreaders – wing type	All	465 mm	
Boom	Length - straight	Infusion	2268 mm
		F18	2405 mm
Spinnaker pole	Length	Infusion	3568 mm
		F18	3522 mm
Rigging	Bridle length	Infusion	1054 mm
Sails	Main sail – Manufacturer	Infusion & F18	Performance
	Jib – Manufacturer		Nacra Class
	Gennaker (spinnaker) - Manufacturer		
Battens	Types (Battens may be tied or use screw adjusters)	Infusion & F18	Fibrefoam
			Nacra Class sail
			Performance Fibreglass
Trapeze	Number	NCR C.1.1	2
Crew	Weight	NCR C.2.2	150kg
	Number	NCR C.2.1 (b)	2
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	12:1

Measurement Guide – Summary of measurements by class: Nacra 5.8			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	5.8	710 mm
	Front chainplate and tangs (measured from front of front beam)	5.8	1892 mm
Front Beam	Mast Ball maximum height	All classes	75mm
	Beam length	5.8	2456 mm
	Dolphin striker strap measurement	5.8	1876 mm
	Dolphin striker strap size	5.8	32 * 6 mm Ali.
			40 * 6 mm Ali
38 * 3 mm SS			
Dolphin Striker Rod Size – 9/16 inch diameter rod	5.8	385 mm	
Rear Beam	Beam length	5.8	2439 mm
Daggerboard	Dagger board - Handles	5.8 – older models	no
		5.8 – newer models	yes
Rudder	Type (size) –	5.8 – older model	Short blade
		5.8 – newer models	Long blade
Mast	Section	5.8	127 * 76 mm clear
	Length	5.8	9156 mm
	Hound height	5.8	6604 mm
	Spreaders – tube type rear arm	All	325 mm
	Spreaders – wing type	All	465 mm
Boom	Length		Nil
Spinnaker pole	Length		Nil
Rigging	Bridle Wire length	5.8 – older models	3' 10 ½ "
	Bridle Foil – Length	5.8	1727 mm
	Bridle foil – Attachment (<i>* Must be attached using ss chain plate 160 mm +- 5mm) advisable to use Nacra U shape chain plate.</i>)	5.8	160 mm +-5mm
Sails	Main sail – Manufacturer Jib - manufacturer	5.8	George Manders
			Nacra Class sail
NPG			
Jib – Furling kit	5.8	Flower & Adams	
		BCC supplied	
Battens	Types	5.8	Fibrefoam
			Nacra Class
			Seaman foam
			Aqua batten blue
			Black Magic foam
Trapeze	Number	NCR C.1.1	2
Crew	Weight	NCR C.2.2	140kg
	Number	NCR C.2.1 (b)	2
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	10:1

Design changes: Bridle foil and large jib introduced Feb 1995.
Square top mainsail.

Measurement Guide – Summary of measurements by class: Nacra 4.5				
Component	Item	Model/Rule ref.	Measurement	
Hulls	Sidestay chainplate (measured from rear of front beam)	4.5	610 mm	
	Front chainplate and tangs (measured from front of front beam)	4.5	1795 mm	
Front Beam	Mast Ball maximum height	All	75mm	
	Beam length	4.5	2418 mm +- 5mm	
	Dolphin striker strap measurement	4.5	1966 mm	
	Dolphin striker strap size	32 * 6 mm Ali.		
		40 * 6 mm Ali		
38 * 3 mm SS				
Dolphin Striker Rod Size – 9/16 inch diameter bolt	4.5	65 mm		
Rear Beam	Beam length	4.5	2405 mm	
Daggerboard	nil	-	-	
Rudder	Type (size) –	4.5	Short blade	
		4.5	Long blade	
		4.5	Shallow draft	
Mast	Section	4.5	127 * 76 mm clear	
	Length	4.5	7773 mm	
	Hound height	4.5	5435 mm	
	Spreaders	-	-	
Boom	Length	-	-	
Spinnaker pole	Length	-	-	
Rigging	Bridle Wire length	4.5	3' 10 ½ " + ¼" shackle	
	Bridle Foil	-	-	
Sails	Main sail – Manufacturer Jib - Manufacturer	4.5	George Manders	
			Nacra Class sail	
			NPG	
Jib – Furling kit	4.5	Flower & Adams		
Battens	Types	4.5	BCC supplied	
			Aqua batten blue Nacra Class	
Trapeze	Number	NCR C.1.1	1	
Crew	Weight	NCR C.2.2	No minimum	
	Number (crew number shall not be changed during an event)	NCR C.2.1 (c)	1 or 2	
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1	

Measurement Guide – Summary of measurements by class: Nacra 14 Square				
Component	Item	Model/Rule ref.	Measurement	
Hulls	Sidestay chainplate (measured from rear of front beam)	14 sq	610 mm	
	Front chainplate and tangs (measured from front of front beam) (outside of the hull)	14 sq	1448 mm	
Front Beam	Mast Ball maximum height	All	75mm	
	Beam length	14sq ++	2418 mm +- 5mm	
	Dolphin striker strap measurement	14sq	1966 mm	
	Dolphin striker strap size			32 * 6 mm Ali.
				40 * 6 mm Ali
				38 * 3 mm SS
	Dolphin Striker Rod Size – 9/16 inch diameter bolt	14sq +	65 mm	
Dolphin Striker Rod Size – 9/16 inch diameter Rod	14sq	385mm		
Rear Beam	Beam length	14sq ++	2405 mm	
Daggerboard	Dagger board - Handles	14sq – older model	No	
		14sq – newer model	Yes	
Rudder	Type (size) –	14sq	Short blade	
		14sq	Long blade	
Mast	Section	14sq	127 * 76 mm clear	
	Length	14sq	7773 mm	
	Hound height	14sq	5435 mm	
	Spreaders	-	-	
Boom	Length	-	-	
Spinnaker pole	Length	-	-	
Rigging	Bridle Wire length	14sq	+++	
	Bridle Foil – Nil	-	-	
Sails	Main sail - Manufacturer		George Manders	
			Nacra Class sail	
			NPG	
	Flower & Adams		-	
Battens	Types		Aqua batten blue	
			Fibrefoam	
			Nacra Class	
Trapeze	Number	NCR C.1.1	1	
Crew	Weight	NCR C.2.2	No minimum	
	Number	NCR C.2.1 (a)	1	
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1	

+ Some latter models have no Dolphin striker strap, instead these have the 9/16” bolt.

++ Some earlier models had slightly narrower beams.

+++ The bridle shall always exceed the top strop length.

Design changes:

- From Feb 1993, outhaul track has been raised, Luff length is shorter and cringle hole is higher.
- Square top Mainsail option.
- Optional dolphin striker or just striker bolt.

Measurement Guide – Summary of measurements by class: Nacra 16 Square			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	16sq	610 mm
	Front chainplate and tangs (measured from front of front beam) (outside of the hull)	16sq	1620 mm
Front Beam	Mast Ball maximum height	16sq	75mm
	Beam length	16sq	2456 mm
	Dolphin striker strap measurement	16sq	1928 mm
	Dolphin striker strap size	16sq	32 * 6 mm Ali.
			40 * 6 mm Ali
38 * 3 mm SS			
Dolphin Striker Rod Size – 9/16 inch diameter Rod	16sq	385mm	
Rear Beam	Beam length	16sq	2455 mm
Daggerboard	Dagger board - Handles	16sq	No
		16sq	Yes
Rudder	Type (size) –	16sq	Short blade
		16sq	Long blade
Mast	Section	16sq	127 * 76 mm clear
	Length +	16sq wire halyard	28 foot
		16sq “O” ring lock	28’ 3 ½ “
	Hound height	16sq wire halyard	6096 mm
		16sq “O” ring lock	6096 mm
	Spreaders – tube type rear arm	All	325 mm
	Spreaders – wing type	All	465 mm
Spreaders – Straight thru type special rear arm ++	16sq, 5.0, 5.2, 18sq	353 mm	
Boom	Length	-	-
Spinnaker pole	Length	-	-
Rigging	Bridle Wire length +++	16sq	+++
	Bridle Foil	-	-
Sails	Main sail - Manufacturer	16sq	George Manders
			Nacra Class sail
			NPG
			Flower & Adams
			-
Battens	Types	16sq	Aqua batten blue
			Nacra Class
			Fibrefoam
Trapeze	Number	NCR C.1.1	1
Crew	Weight	NCR C.2.2	No minimum
	Number	NCR C.2.1 (a)	1
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	10:1

- + Wire halyards shall not be fitted to masts that are made to accommodate “O” ring locks.
- ++ Special rear arms are available to allow adjustment to match the straight through spreaders. Only fitted to 5.0, 5.2, 16sq or 18sq that were fitted with straight through spreaders.
- +++ The bridle shall always exceed the top strop length.

Design Changes:

- a) Both horizontal and vertical cut sails repairs to top section (top four panels) is acceptable.
- b) Dacron NYT sails are also available from 09/1994
- c) Square top mainsail with foam battens introduced Feb. 2012

Measurement Guide – Summary of measurements by class: Nacra 350			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	350	525 mm
	Front chainplate and tangs (measured from front of front beam)	350	1065 mm
Front Beam	Mast Ball maximum height	All	75mm
	Beam length	350	2040 mm
	Dolphin striker strap measurement	-	-
	Dolphin striker strap size	350	4mm 1*19 ss wire
	Dolphin Striker Rod Size – 9/16 inch diameter bolt	350	65 mm
Rear Beam	Beam length	350	2025 mm
Daggerboard	nil	-	-
Rudder	Type (size) –	350	Long blade
		350	Shallow Draft
Mast	Section	350	89 * 59 mm clear
	Length	350	5700 mm
	Hound height	350	4025 mm
	Spreaders	-	-
Boom	Length	-	-
Spinnaker pole	Length	-	-
Rigging	Bridle Wire length	350	994 mm
	Bridle Foil	-	-
Sails	Mainsail - Manufacturer	350	Nacra Class sail
	Jib - Manufacturer	350	Nacra Class sail
Battens	Types	350	Nacra Class
Trapeze	Number	NCR C.1.1	1
Crew	Weight	NCR C.2.2	No minimum
	Number (crew number shall not be changed during an event)	NCR C.2.1 (c)	1 or 2
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1

Measurement Guide – Summary of measurements by class: Nacra 430 (Clubman, Sports or Rocket)			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	430 all	610 mm
	Front chainplate and tangs (measured from front of front beam)	430 all	1160 mm
Front Beam	Mast Ball maximum height	All	75mm
	Beam length	430 all	2268 mm
	Dolphin striker strap measurement	-	-
	Dolphin striker strap size	-	-
	Dolphin Striker Rod Size – 9/16 inch diameter bolt	430 all	65 mm
Rear Beam	Beam length	430 all	2250 mm +- 7mm
Daggerboard	nil	-	-
Rudder	Type (size) –	430 Sports & Rocket	Long blade
		430 Clubman	Shallow Draft
Mast	Section	430 all	127 * 76 mm clear
	Length	430 all	7092 mm
	Hound height	430 all	4905 mm
	Spreaders	-	-
Boom	Length	-	-
Spinnaker pole	Length	430 Rocket	2200 mm
Rigging	Bridle Wire length	430 all	1039 mm
	Bridle Foil	-	-
Sails	Mainsail – Manufacturer - Dacron	430 Clubman	Nacra Class sail
	Mainsail – Manufacturer – Flex mylar	430 Sport & Rocket	Nacra Class sail
	Jib – Manufacturer – Flex mylar	430 Sport & Rocket	Nacra Class sail
Battens	Types	430 all	Nacra Class
Trapeze	Number	NCR C.1.1	1
Crew	Weight	NCR C.2.2	No minimum
	Number (crew number shall not be changed during an event)	NCR C.2.1 (c)	1 or 2
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1

Models

- a) Clubman – Dacron mainsail only with shallow draft rudders.
- b) Sports – Flex mylar mainsail and jib with deep draft rudders.
- c) Rocket - Flex mylar mainsail and jib with deep draft rudders, plus mid pole snuffer spinnaker.

Measurement Guide – Summary of measurements by class: Nacra Sirocco			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	Sirocco	610 mm
	Front chainplate and tangs (measured from front of front beam)	Sirocco	Not avail.
Front Beam	Mast Ball maximum height	All	75mm
	Beam length	Sirocco	2268 mm
	Dolphin striker strap measurement	-	-
	Dolphin striker strap size	-	-
	Dolphin Striker Rod Size – 9/16 inch diameter bolt	Sirocco	65 mm
Rear Beam	Beam length	Sirocco	2250 mm +- 5mm
Daggerboard	nil	-	-
Rudder	Type (size) –	Sirocco	Square shallow draft blade
			Short Blade
			Long Blade
Mast	Section	Sirocco	127 * 76 mm clear
	Length	Sirocco	6705 mm
	Hound height	Sirocco	4674 mm
	Spreaders	-	-
Boom	Length	-	-
Spinnaker pole	Length	-	-
Rigging	Bridle Wire length	Sirocco	1039 mm
	Bridle Foil	-	-
Sails	Mainsail – Manufacturer	Sirocco	Nacra Class sail
	Jib – Manufacturer	-	-
Battens	Types	Sirocco	Nacra Class
Trapeze	Number	NCR C.1.1	1
Crew	Weight	NCR C.2.2	No minimum
	Number	NCR C.2.1	Not specified
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1

Resort model with vertical coloured mainsail with built in floatation. Square style rudders.

Measurement Guide – Summary of measurements by class: Nacra 5.0			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	5.0	610 mm
	Front chainplate and tangs (measured from front of front beam)	5.0	1550 mm
Front Beam	Mast Ball maximum height	All	75mm
	Beam length	5.0	2404 mm
	Dolphin striker strap measurement	5.0	1911 mm
	Dolphin striker strap size	5.0	32 * 6 mm Ali.
			40 * 6 mm Ali
38 * 3 mm SS			
Dolphin Striker Rod Size – 9/16 inch diameter rod	5.0	385 mm	
Rear Beam	Beam length	5.0	2390 mm
Daggerboard	nil		-
Rudder	Type (size) –	5.0	Long blade
Mast	Section	5.0	127 * 76 mm clear
	Length +	5.0 wire halyard	27 foot
		5.0 “O” ring lock	27’ 3 ½ “
	Hound height	5.0	6096 mm
	Spreaders – tube type rear arm	5.0	325 mm
	Spreaders – wing type	5.0	465 mm
	Spreaders – Straight thru type special rear arm ++	16sq, 5.0, 5.2, 18sq	353 mm
Boom	Length	-	-
Spinnaker pole	Length	-	-
Rigging	Bridle Wire length	5.0 early boats	3’ 10 ½ “ wire + ¼ shackle
	Bridle Foil (* Must be attached using ss chain plate 160 mm +/- 5mm) advisable to use Nacra U shape chain plate.	5.0	1727 mm
Sails	Main sail – Manufacturer		George Manders
	Jib - Manufacturer		Nacra Class sail NPG Flower & Adams
	Jib – Furling kit	5.0	BCC supplied
Battens	Types	5.0	Seaman foam
			Black magic
			Blue streak
			Aqua blue
			Nacra Class
Trapeze	Number	NCR C.1.1	2
Crew	Weight	NCR C.2.2	No minimum
	Number	NCR C.2.1 (b)	2
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1

+ Wire halyards shall not be fitted to masts that are made to accommodate “O” ring locks.

++ Special rear arms are available to allow adjustment to match the straight through spreaders.
Only fitted to 5.0, 5.2, 16sq or 18sq that were fitted with straight through spreaders.

Design Changes:

- Early 5.0 had a small jib (Flower and Adams).
- Early 5.0 may have Neil Pryde sails.
- Bridle foil introduced 02 1996.
- Square top mainsail introduced Feb 2014.

Measurement Guide – Summary of measurements by class: Nacra 5.2			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	5.2	610 mm
	Front chainplate and tangs (measured from front of front beam)	5.2	1620 mm
Front Beam	Mast Ball maximum height	All	75mm
	Beam length	5.2	2400 mm
	Dolphin striker strap measurement	5.2	1878 mm
	Dolphin striker strap size	5.2	32 * 6 mm Ali.
			40 * 6 mm Ali
38 * 3 mm SS			
Dolphin Striker Rod Size – 9/16 inch diameter rod <i>Some early boats had a ½ inch diameter striker rod</i>	5.2 5.2	385 mm	
Rear Beam	Beam length	5.2	2404 mm
Daggerboard	Dagger board - Handles	5.2 – old models	No handle
		5.2 newer models	Yes handle
Rudder	Type (size) – <i>Early 5.2 had wider and more bulbous type blades</i>	5.2	Long blade
			Short blade
			Wide blade
Mast	Section	5.2	127 * 76 mm clear
	Length +	5.2 wire halyard	28 foot
		5.2 “O” ring lock	28’ 3 ½ “
	Hound height	5.2	6096 mm
	Spreaders – tube type rear arm	5.2	325 mm
	Spreaders – wing type	5.2	465 mm
Spreaders – Straight thru type special rear arm ++	16sq, 5.0, 5.2, 18sq	353 mm	
Boom	Length +++	5.2	See drawing B1
Spinnaker pole	Length	-	-
Rigging	Bridle Wire length	5.2	3’ 11 ½ “
	Bridle Foil	5.2	-
Sails	Main sail – Manufacturer Jib - Manufacturer	5.2	George Manders
			Nacra Class sail
			NPG Flower & Adams
Jib – Furling kit	5.2	-	
Battens	Types	5.2	Seaman foam
			Black magic
			Aqua blue
			Nacra Class
Trapeze	Number	NCR C.1.1	2
Crew	Weight	NCR C.2.2	No minimum
	Number	NCR C.2.1 (b)	2
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1

- + Wire halyards shall not be fitted to masts that are made to accommodate “O” ring locks.
- ++ Special rear arms are available to allow adjustment to match the straight through spreaders. Only fitted to 5.0, 5.2, 16sq or 18sq that were fitted with straight through spreaders.
- +++ Measurement taken from gooseneck end. Bale position as per drawing B1

Internal or external outhaul car systems allowed. Maximum overall measurement 8’ 3 ½ “

Measurement Guide – Summary of measurements by class: Nacra 18 Square			
Component	Item	Model/Rule ref.	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	18 sq	610 mm
	Front chainplate and tangs (measured from front of front beam) (outside of the hull)	18 sq	1785 mm
Front Beam	Mast Ball maximum height	All	75mm
	Beam length	18 sq	3356 mm
	Dolphin striker strap measurement	18 sq	2788 mm
	Dolphin striker strap size	18 sq	32 * 6 mm Ali.
			40 * 6 mm Ali
38 * 3 mm SS			
Dolphin Striker Rod Size – 9/16 inch diameter Rod <i>Early 18sq have ½ “ rod</i>	18 sq	385mm	
Rear Beam	Beam length	18 sq	3334 mm
Daggerboard	Dagger board - Handles	18 sq early model	No
		18 sq latter model	Yes
Rudder	Type (size) – <i>Early 18 sq had wider and more bulbous type blades</i>	18 sq	Short blade
		18 sq	Long blade
		18 sq early model	Wide blade
Mast	Section	18 sq	127 * 76 mm clear
	Length +	18sq wire halyard	30’ 4 1/2 “
		18sq “O” ring lock	30’ 7 ½ “
	Hound height	18sq	6605 mm
	Spreaders – tube type rear arm	All	325 mm
	Spreaders – wing type	All	465 mm
Spreaders – Straight thru type special rear arm ++	16 sq, 5.0, 5.2, 18sq	353 mm	
Boom	Length +++	18 sq	See drawing B1
Spinnaker pole	Length	-	-
Rigging	Bridle Wire length ++++	18sq	++++
	Bridle Foil	-	-
Sails	Main sail – Manufacturer Some very early 18sq may carry the Skip Elliott USA stamp	18sq	George Manders
			Nacra Class sail
			NPG
Battens	Types	18sq	Flower & Adams
			Aqua batten blue
			Nacra Class
			Fibrefoam
	Seaman foam		
Trapeze	Number	NCR C.1.1	1
Crew	Weight	NCR C.2.2	No minimum
	Number	NCR C.2.1 (a)	1

- + Wire halyards shall not be fitted to masts that are made to accommodate “O” ring locks.
- ++ Special rear arms are available to allow adjustment to match the straight through spreaders. Only fitted to 5.0, 5.2, 16sq or 18sq that were fitted with straight through spreaders.
- +++ Measurement taken from gooseneck end. Bale position as per drawing B1

Internal or external outhaul car systems allowed. Maximum overall measurement 8’ 3 ½ “

- ++++ The bridle shall always exceed the top strop length.

Measurement Guide – Summary of measurements by class: Nacra 5.5 and 5.7 sloop			
Component	Item	Model/Rule	Measurement
Hulls	Sidestay chainplate (measured from rear of front beam)	5.5 & 5.7sl	660 mm
	Front chainplate and tangs (measured from front of front beam)	5.5 & 5.7sl	1785 mm
Front Beam	Mast Ball maximum height	All	75mm
	Beam length	5.5 & 5.7sl	2456 mm
	Dolphin striker strap measurement	5.5	1902 mm
		5.7sl	1963 mm
	Dolphin striker strap size	5.5 & 5.7sl	32 * 6 mm Ali.
			40 * 6 mm Ali
38 * 3 mm SS			
Dolphin Striker Rod Size – 9/16 inch diameter rod	5.5 & 5.7sl	385 mm	
Rear Beam	Beam length	5.5 & 5.7sl	2415 mm
Daggerboard	nil		-
Rudder	Type (size) –	5.5 & 5.7sl	Long blade
		5.5	Short blade
Mast	Section	5.5 & 5.7sl	127 * 76 mm clear
	Length	5.5 & 5.7sl	8858 mm
	Hound height	5.5 & 5.7sl	6401 mm
	Spreaders – tube type rear arm	5.5 & 5.7sl	325 mm
	Spreaders – wing type	5.5 & 5.7sl	465 mm
Boom	Length	-	-
Spinnaker pole	Length	-	-
Rigging	Bridle Wire length	5.5	432 mm
	Bridle Foil (* Must be attached using a 4 mm bridle wire).	5.5	1318 mm
Sails	Main sail – Manufacturer Jib - Manufacturer	5.5 & 5.7sl	George Manders
			Nacra Class sail
			NPG Flower & Adams
Jib – Furling kit	-	-	
Battens	Types	5.5 & 5.7sl	Seaman foam
			Aqua blue
			Nacra Class
Trapeze	Number	NCR C.1.1	2
Crew	Weight	NCR C.2.2 - 5.5	125kg
		NCR C.2.2 - 5.7	140kg
	Number	NCR C.2.1 (b)	2
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1

Design Changes: 5.5

- a) Has both Dacron and Vertical cut Mylar sails.
- b) Repairs to top section (Mylar sails, top four panels) is acceptable.
- c) Batten pocket positions may alter up to Sail number 138.
- d) No luff curves are acceptable.

Measurement Guide – Summary of measurements by class: Nacra Inter 17				
Component	Item	Model/Rule ref.	Measurement	
Hulls	Sidestay chainplate (measured from rear of front beam)	I17	610 mm	
	Front chainplate and tangs (measured from front of front beam)	I17	1620 mm	
Front Beam	Mast Ball maximum height	All	75mm	
	Beam length	I17	2404 mm	
	Dolphin striker strap measurement	I17	1911 mm	
	Dolphin striker strap size			32 * 6 mm Ali.
				40 * 6 mm Ali
			38 * 3 mm SS	
Dolphin Striker Rod Size – 9/16 inch diameter rod	I17	385 mm		
Rear Beam	Beam length	I17	2390 mm	
Daggerboard	Type	I17		
Rudder	Type (size) –	I17	Long blade	
		I17	Short blade	
Mast	Section	I17	165 * 63 mm wing	
	Length	I17	8840 mm	
	Hound height	I17	6400 mm	
	Spreaders – tube type rear arm	I17	325 mm	
	Spreaders – wing type	I17	465 mm	
Boom	Length	I17	2405 mm	
Spinnaker pole	Length	-	-	
Rigging	Bridle Foil - Wire length	-	-	
	Bridle Foil (* Must be attached using ss chain plate 160 mm +/- 5mm) advisable to use Nacra U shape chain plate.	I17	1727 mm	
Sails	Main sail – Manufacturer Jib - Manufacturer		George Manders	
			Nacra Class sail	
			NPG	
	Flower & Adams			
	Jib – Furling kit	-	-	
Battens	Types		Seaman foam	
			Aqua blue	
			Nacra Class	
Trapeze	Number	NCR C.1.1	2	
Crew	Weight	I17	Nil	
	Number (crew number shall not be changed during an event)	I17 Cat rig NCR C.2.1 (a)	1	
		I17 sloop rig NCR C.2.1 (b)	2	
Mainsheet	Mainsheet system – maximum purchase	NCR C.6.1 (d)	8:1	

Measurement Guide – Summary of measurements by class: Nacra International 15 & 17			
Component	Item	Model/Rule ref.	Measurement

All **measurements** are as per International Class Rules.

Boats competing in Nacra Class events shall comply with the Nacra class rules for Australia.

Measurement Guide – Summary of measurements by class: F16			
Component	Item	Model/Rule ref.	Measurement

All **measurements** are as per International Class Rules.

Boats competing in Nacra Class events shall comply with the Nacra class rules for Australia.

Mast F16	159 * 76 mm Black wing
Mast length	8515 mm
Mast hound height	6095 mm
Boom Length	2070 mm
Spinnaker pole length	3400 mm



Australian Nacra Class Association.

RE : Furling Jibs, Nacra 5.0 – Nacra 5'8

As from the 12th. August 2022

The Nacra 5.0 and Nacra 5.8 can be sailed and fitted with a jib furling system.
All new boats can be ordered with a jib furling system.
A Retro Kit is also available.
The jib sail on both boats will remain the same but will be fitted with soft leech battens to enable full furling of the jib.

The Furling jib will allow,

1. Easy Launching and retrieving of the boat.
2. Safety in High Winds
3. Safety before and after Racing

The Class Rules will also allow that the Jib can be furled while Racing.

RETRO KITS.

The Retro Kits will be available 22nd August 2022.

Modification of existing Jibs.

A modification Leech Batten Kit will be included in the Retro Kit.

This can be done by;

- 1 . Returning existing jibs to the nacra Factory .
 - 2 . By a sailmaker approved by Nacra.
- Only Supplied Leech batten Kits will be "Class Legal".

Contact your Local Nacra Dealer for Full Details on Kits and Pricing.

Yours in Sailing,
Roscoe Guinea.

Nacra Australia

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Change to Rule C.6.1 (d)

Mainsheet Purchase on F18, Infusion and Evolution maybe increased to maximum of 12:1 in line with F18 Class Rules.

Change requested at AGM January 2023 and approved by NA.

Email advice 4th April 2023.