B.7 Other Measurements (ERS G.8)

B.7.1 Reinforcement size (ERS G.8.4)

Corner **reinforcement** size, whether **primary** or **secondary**, is measured from the **corner measurement point**, which may be outside the **sail**. The measurement is the greatest dimension from the **corner measurement point** to the outer edge of the **reinforcement**, and should be found by swinging an arc with the tape as illustrated in Figure 18. Permitted **tabling** is not included in the measurement of **reinforcement**.



Figure 18. Clew Reinforcement

The measurement of any **reinforcement**, other than at one of the corners of the **sail** shall be taken to be the greatest dimension between any two points of the same **reinforcement**. This may not necessarily be continuous across the **reinforcement**.

B.7.2 Batten Pocket Length (ERS G.8.1)

The inside and outside lengths of a **batten pocket** are measured ignoring the effect of any elastic or other batten retaining device.

The inside length is the greatest dimension measured parallel to the centreline of the pocket from the **sail edge** to the inside of the stitching, fold or similar at the inside end of the pocket.

The outside length is the greatest dimension measured parallel to the centreline of the pocket, from the **sail edge** to the extreme end of the pocket.

B.7.3 Batten Pocket Width (ERS G.8.2)

Local widening for batten insertion is not included in the measurement of either inside or outside **batten pocket width**.

The inside width is measured at 90° to the centreline of the pocket, between the inside of the stitching or similar on each side of the pocket.

The outside width is measured at 90° to the centreline of the pocket, between the outside edges of the pocket.

B.7.4 Foot Irregularity (ERS G.8.3)

With the **sail** flat in the area of the **foot**, the **tack point** should be folded over and run down the edge of the **foot**, and its extensions if necessary, until it reaches the **clew point**. During this procedure, the greatest dimensional difference between the two parts of the **sail edge**, measured at 90° to the edges, should be noted. The same procedure should be undertaken, folding over and running the **clew point** down the edge of the **foot** until it reaches the **tack point**. Again, the greatest dimensional difference between the **sail edges** should be noted. The foot irregularity is the greater of the two noted dimensions.

B.8 Sail Numbers (RRS 77 & RRS Appendix G)

Measurement requirements for the size, shape and position etc. of class insignia, national letters and sail numbers are laid down in RRS 77& RRS Appendix G, and in most individual **class rules**. These shall be checked when required to be so by **class rules** or an MNA.

Where there are differences between the RRS and **class rules**, the **class rules** shall prevail. Where **class rules** invoke the RRS then, except when altered by **class rules**, the RRS shall be applied.

RRS Appendix G - 1.2(a) requires, amongst other things, the national letters and sail numbers to be "clearly legible". Determination of this requirement will be relative and is not strictly a matter of measurement.

Several classes specify the colour of insignia, letters and numbers. Where this is not the case, the RRS Appendix G - 1.2(a) rule should be applied. This requires the national letters and sail numbers (but not the insignia) to be of the same colour.

RRS Appendix G - 1.2(b) gives the boat's overall length as the criteria for character size and the space between adjoining characters. Overall length shall be taken as **hull length** (ERS D.3.1).

RRS Appendix G - 1.3(a) requires the class insignia, national letters and sail numbers on the starboard side of mainsails and headsails to be higher than those on the port side. For clarity, each of these items should be treated separately, i.e. the starboard insignia should be higher that the port insignia (subject to 1.3(b)), the starboard national letters shall be higher than the port national letters and the starboard sail numbers should be totally above the port sail numbers.

RRS Appendix G - 1.3(c) requires that, on sails measured after 31 March 1997, where national letters are displayed, these are placed above the sail numbers.

B.9 Advertising (RRS 79 & RRS Appendix G)

The size and position of permitted advertising on sails is governed by RRS 79 & RRS Appendix 1.

There are two categories of advertising, A and C with Category A permitting only limited advertising and Category C much more advertising. There is no category B. The Category permitted for a particular boat will normally be as specified in **class rules**. If it is not specified in **class rules**, Category A will apply. **Class rules** may only specify the Category; they may not change the requirements of the RRS Appendix.

For Category A boats (the default category), the only advertising permitted on a **sail** (in addition to the class insignia) is one sailmaker's mark per side. Each mark shall fit into a 150mm x 150mm square and, except on a **sail** measured as a spinnaker, shall be totally within a distance from the **tack point** of either 300mm or 15% of the **foot length**, whichever is the greater. The table below gives the greater of these dimensions for most international classes. This limit should be measured in a similar manner to corner **reinforcement**.



Figure 19. Measuring limit of sailmakers mark

Limit of Sailmakers Mark from tack point						
Class	Mainsail	Headsail	Class	Mainsail	Headsail	
Cadet	300	300	H Boat	450	425	
Contender	405		J 24	445	655 / 435	
Dragon	520	530	Lightning	445	350	
Enterprise	400	300	Mirror	320	300	
Etchells	530	380	OK	405		
Europe	410		Optimist	300		
Finn	490		Snipe	381	300	
Fireball	425	300	Soling	480	400	
5-0-5	430	345	Star	610	337	
Flying Dutchman	425	520	Tempest	510	375	
Flying Fifteen	450	355	Tornado	355	300	
470	400	355	Vaurien	330	300	
420	360	300	Yngling	390	300	

B.10 ICA Sail Buttons and Labels

Some classes require all **sails** to carry an ICA sail button or label. These are a means of raising revenue and can normally be purchased from the class association.

Where the **class rules** lay down a requirement for sail buttons or labels no **sail** shall be accepted by a measurer unless the button or label is securely attached to the **sail**.

Buttons and labels are not transferable from one **sail** to another and therefore the measurer, when satisfied that the **sail** complies with all the relevant rules, should sign or stamp across the button or label and onto the **sail**. This is in addition to the normal sail **certification mark**. It follows from this that a measurer should refuse to sign a **sail** where the button or label already has a signature across it.



Figure 20. Mainsail tack with Sail Label

B.11 Certifying and Certification Marks (ERS C.6.3)

When satisfied that a **sail** complies with all applicable rules, the measurer is required to **certify** it by the attaching a **certification mark**. This is undertaken in different ways in different countries. In Germany, for example, the **certification mark** takes the form of a sail button marked DSV (Deutscher Segler-Verband). Other countries use **certification mark** labels or stamps. The ISAF recommendation is a stamp or label of the design shown in Figure 21. Printed in black would indicate **official measurer** measured where as in red would indicate "in-house" certification.

CERTIFIED EQUIPMENT See See	ERRTIFIED EQUIPMENT Base of the state

Figure 21. Certification Mark labels from Sweden

In the absence of any specific national or class requirements, the measurer should certify, by signing and dating, the sail in the tack on mainsails and headsails and in the head on spinnakers. Event limitation marks should be in the clew. In addition, to enable a particular sail to be identified in the future, if it is not marked with a manufacturer's serial number then the measurer should add one. Also, if class rules limit the number of sails permitted to be used by a single boat then, to prevent the swapping of sails between boats, the measurer should add a sail or plaque number to the mark. (Appendix I gives suggestions for suitable marking pens etc.)

A measurer should keep a record of all **certified** sails, detailing the date and serial number of each against the sail or plaque number of the boat. In addition, if required by **class rules**, this information should also be added on the **certificate**.

This guide has been prepared at the request of the ISAF by the Royal Yachting Association together with the help of the Danish Sailing Association Deutscher Segler-Verband Swedish Sailing Federation