SAIL CARE MAINTENANCE
BEST PRACTICES

The natural environment of sun, salt water and high humidity are enemies of the materials in your sails. Clearly, normal use will expose your sails to these environmental factors but good practices will see exposure to these conditions minimised when sails are not in use.

Use factors such as flapping or flogging, leech flutter and crushing sails into bags all contribute to a shorter service life and good practices will see this avoided.

The following environmental, use factors and service requirements are important for all sailors to understand.

THE ENVIRONMENTAL IMPACT ON SAILS

All sail materials degrade to varying degrees under UV exposure. Salt water can result in electrolytic corrosion of sail fastenings and high humidity levels can be a contributing factor to mildew and mold formation.

To mitigate the effects of these environmental factors sailcloth and sail membrane manufacturers add inhibitors and top coatings to improve UV resistance, sailmakers isolate dissimilar materials to reduce corrosion potential, antimicrobials are added to adhesives and external treatments can be applied to minimize the potential for mildew to occur.

USE FACTORS

It should be self-evident that flogging, flutter and impact will damage technical textiles such as sailcloth or sail membranes.

To measure the degradation in material performance sailcloth manufacturers and sailmakers conduct a range of tests including “flutter and impact” to simulate the reduction in stretch resistance and break strength associated with flutter and impact in use. Fold and flex tests are also carried out to simulate activities such as folding sails.

SERVICE REQUIREMENTS

As a boat owner or sailor you get to know your boat very well, can detect the change in the sound of a winch when sheeting a sail on or engine when motoring and spot the flattening of a sheet or halyard on a winch. With sails it's the eyes that have it as a first line of defense in detecting service issues.

For a dinghy, Sportsboat or OD Keelboat sailor an inspection of the sails as they are put away at the end of a day of sailing will catch most service issues. On a crewed racing boat, a good crew will frequently bring small issues to the attention of the skipper at the end of a day's sailing. On a race-boat, monitor the conditions of your sails just as you would any other piece of equipment and be proactive about service issues you identify.

For the cruising sailor, a visual inspection is also the starting point and log details on non critical issues as a reminder if away from port.

There are small repair issues that as a sailor you can address yourself, so we suggest you put together a sail repair kit consisting of –

Insignia sticky back 75mm cut roll OR 1sqm (Insignia is used for sail numbers and comes in Black, White, Blue, Red, Green).

Needle & sailmakers palm plus wax thread.
Pair of sailmakers shears.

Methylated spirits and clean cloth to wipes salt of sails before repairing.
These items should be placed in a small water proof container clearly marked "SAIL REPAIR KIT".

SAIL CARE

• Hoist sails out of the full wind strength if possible on windy days.

• Protect the mainsail from UV with a good cover when stored on the boom.

• Don't motor sail with the mainsail flapping, keep it trimmed and tack with the wind to avoid flapping.

• Tension the leechlines sufficiently to stop the edge of the sail fluttering.

• On furling headsails, ease the luff tension when rolled between sailing days.

• When reefing a furling headsail take the opportunity if you can to bear away and take the reef in under reduced load. A smoother reef with less sail damaging flogging will be accomplished.

• Practice mainsail reefing so that it can be readily accomplished rather than allowing the sail to flog.

• For slab reefing mainsails, ensure that the reefed body of the sail is adequately secured. Don't conduct a "flutter and impact" test with an unsecured body of a reefed mainsail.

MATERIAL TYPES

DACRON

• Dacron finishes can vary between a soft fabric suitable for cruising sails through to a very hard finish used in some dinghy sails and many OD keelboat sails.

• Hard finish sails should only be rolled and stored where they will not be crushed.

• Damage by UV exposure will be slow but constant so when not in use store under cover away from UV exposure.

• Dacron sailcloth will last many years of service if appropriately cared for.

• A hard finish Dacron used for a Race Series sail will not have the same general durability as a soft finish but will have a longer race life by comparison if properly cared for.

• Never put sails into a chlorinated swimming pool to clean. For a Dacron sail the vulnerable part will be the stitching which is not chlorine resistant.

• Do not use solvents or cleaning agents on sails without professional guidance.

• Dacron sails will typically feature aluminium headboards, stainless steel rings and nickel plated grommets for slides or hanks. An occasional rinse with fresh water to remove salt in saltwater environments will help to reduce corrosion.

MATERIAL TYPES

LAMINATES

• All laminate sails consist of yarns sandwiched between external layers.

• The yarn can vary between relatively low stretch resistant polyester to highly stretch resistant carbon fiber.

• The external layers can be polyester film or polyester film and Dacron taffeta combinations.

• By their nature these materials are not as durable as a simple woven Dacron but offer higher performance.

• Avoid flaking or folding laminate sails on the same fold line each time they are put away.

• Never put sails into a chlorinated pool to clean. For a Laminate sail the vulnerable part will be the stitching which is not chlorine resistant. Do not used solvents or cleaning agents.

SPINNAKER CLOTH

• Spinnaker cloth is typically produced as a woven nylon yarn fabric, with a heat set colour & coated or impregnated with various finish's.

• Modern spinnaker cloth is very stable with respect to colours but "bleeding" of colours can still occur if coloured spinnakers are put away wet.

• Don't hoist spinnakers at the dock to dry by flapping. This is the equivalent of a "flutter and impact" destructive test carried out by the sailcloth manufacturers.

• Nylon is an exceptionally strong fiber for its weight and will stretch substantially under load before breaking however using a spinnaker above its range or broaching followed by explosive refills can be a problem leading to blow outs for any spinnaker cloth.

• Sailcloth manufacturers test spinnaker cloth for tear resistance and on the boat you should regularly inspect and cover or tape snag points that could result in a spinnaker tearing on a hoist or drop.

• Do not use solvents or cleaning agents on sails without professional guidance.