



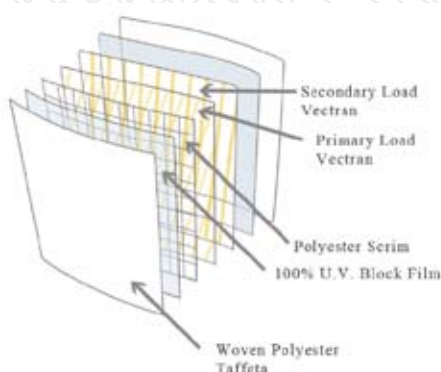
Custom Axis Laminate (CAL)

Performance Cruising Sails by Ullman Sails

Custom Axis Laminate (CAL) sails are high-quality cruising sails that are both durable and low stretch, maintaining long-lasting shape and performance. Slightly higher in cost than high-quality Dacron sails, this custom cruising laminate offers extreme value and performance for the cruising sailor.

Design & Construction

CAL sails are made from laminated sections, each with a custom fiber matrix that addresses the specific loads to a particular area of the sail. Based on the size and specifications of your boat and sail, additional fibers are placed where the loads are higher. Ullman CAL sails are built with Vectran fibers that are both high strength and low stretch, which help maintain sail shape. The laminate is made up of seven layers, including woven Polyester Taffeta, 100% UV Block film and mold protectant to protect the load-bearing fibers and increase longevity.



Performance & Longevity

Every CAL sail is custom-designed by the Ullman Sails Design Team to ensure optimized sail shape. In addition, the custom laminate characteristics make your boat easier to helm and your sails easier to trim.

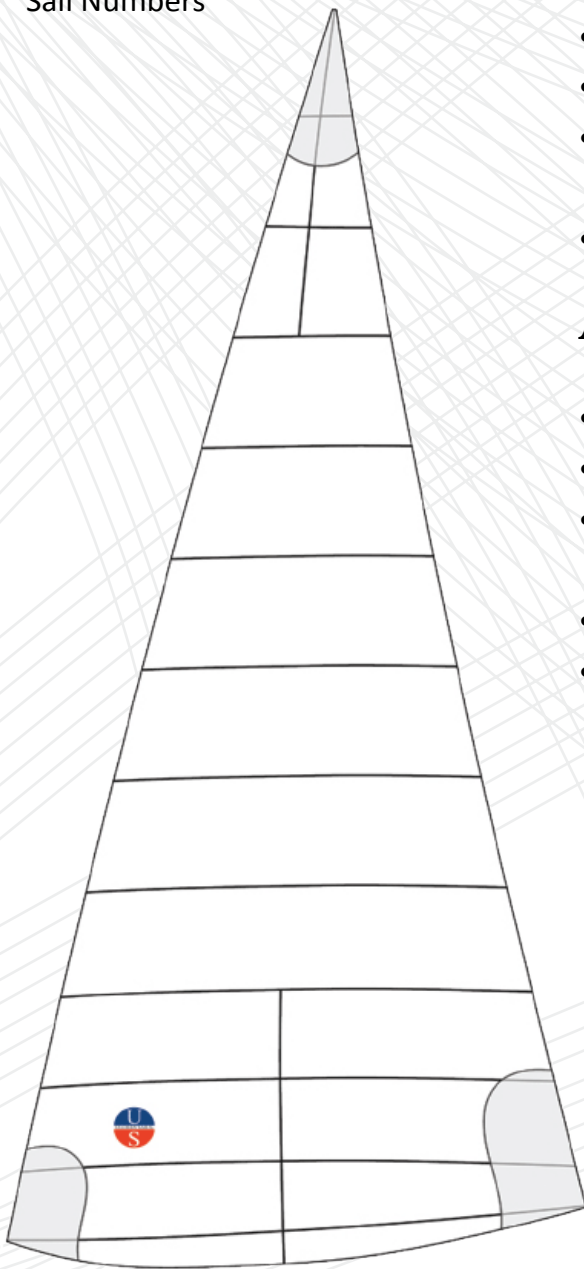
- Low stretch translates into less heel and less weather helm. By keeping the boat flatter and reducing the need to reef, cruising is safer and more enjoyable for you and your family.
- The custom Vectran thread lines in each section capture all the loads of the sails to keep the shape smooth and efficient through a wider range of conditions.
- CAL sails are a similar weight to Dacron sails, but stronger.
- CAL sails are designed to be roller furled, making sail storage simple and easy.
- Performance cruisers choose CAL sails because of the laminate's efficiency, power and pointing ability.
- The performance life of CAL sails will significantly outlast Dacron. However, if you expect to use your sail for the next 15 years, regardless of what shape it may have, then you may want to consider Dacron.

Standard Specifications Headsails

- Foam Luff
- Stainless Rings
- UV Covers
- Telltales 7 Draft Stripes

Available Options

- Hanks
- Sail Numbers



Standard Specifications Mainsails

- 2 Reefs
- 2 Full Battens
- 2-4 Tapered Battens (determined by sail size)
- Headboard
- Bold Rope or Standard Slides
- Semicircle Reinforcements at All Slide Locations
- Luff Box for All Full Battens
- Stainless Steel Rings
- Leech Line
- Foot Line
- Cunningham
- Clew Blocks and UV Covers for Furling Mainsails
- Telltales & Draft Stripes

Available Options

- Third Reef
- Full Battens
- Single-Line Reefing Blocks
- Sail Numbers
- Gray Taffeta

