

clear ahead

Speed · Innovation · Performance



D4[®] Custom Load Path Sail Laminates

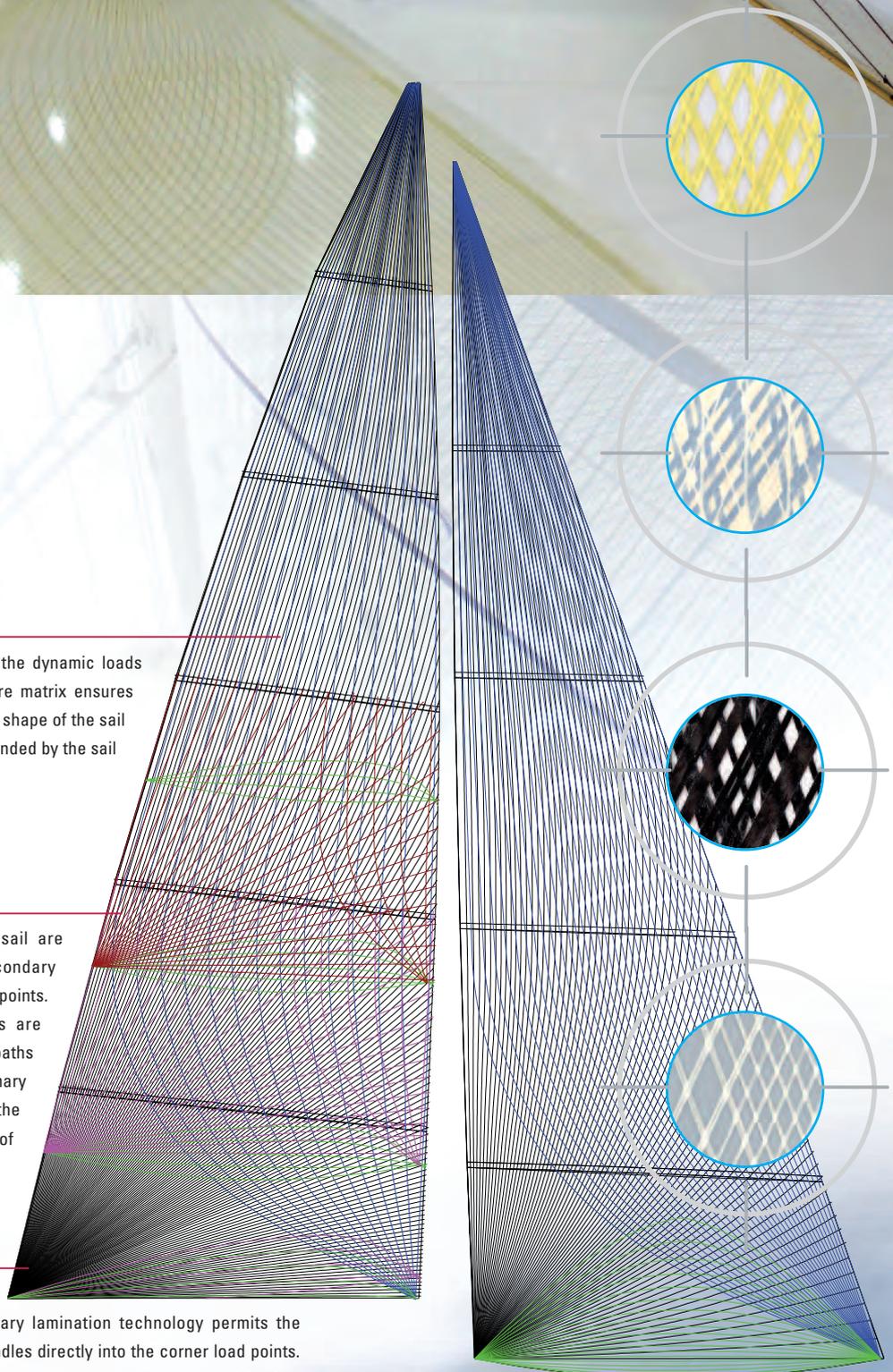


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The D4[®] fibre layout absorbs the dynamic loads when sailing. The complex fibre matrix ensures that, as loads and trim vary, the shape of the sail will remain within the limits intended by the sail designer.

Loads imposed by a reefed sail are addressed by the use of secondary layers that form dedicated reef points. From these reef points fibres are placed along calculated load paths until they blend in with the primary yarns. This technique extends the performance and structural life of a sail dramatically.

Special treatment of the fibres combined with proprietary lamination technology permits the concentration of thick fibre bundles directly into the corner load points. This makes large, heavy corner reinforcements redundant, resulting in a lighter, longer lasting sail structure.





© Nico Krauss

D4® – PREMIUM

Whatever your type of sailing, from medium sized to very large yachts, D4® Premium membranes are for you. Whether it's racing across the top of the Southern Ocean or cruising the world, club or Grand Prix racing, or anything in between, D4® Premium has the fibre and surface component combination perfect for all.

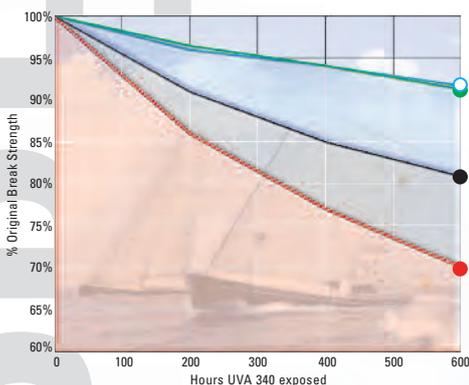
D4® Premium allows yacht owners to select from the widest range of surfaces and fibres on the market. High modulus and high tenacity yarns can be applied as a single fibre type or in blended ratios with other fibres and combined with various film or taffeta surfaces. Industry leading flexibility in fibre placement and density

guarantee's that the sailmaker can provide the correct performance characteristics of the membrane. This flexibility allows the sailor to design a sail to their sailing activity, whether racing, cruising or both.

DIMENSION-POLYANT's long standing experience in sailcloth design, fibre handling and laminating adds tremendous know-how and patented production methods to the successful D4® system, resulting in the most versatile and reliable membrane system in the world. Victories in multiple Grand Prix races, both around-the-buoys and offshore, offer proof of D4®'s superior performance.

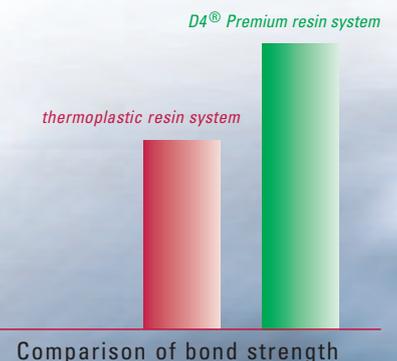
- Durable – superior construction technology supported by over twenty years of laminating experience.
- Versatile – combinations of fibres, films and taffetas to meet your requirements whether racing or cruising.
- Light weight – industry leading lamination technology utilising both external positive pressure and vacuum system is the key to light membranes.
- Shape retention – the complex fibre matrix ensures that, as loads and trim vary, the shape of the sail will remain within the limits intended by the sail designer.

High-molecular weight resin systems offer the best properties for sailcloth applications, resulting in unsurpassed bond strength and longevity. DIMENSION-POLYANT knows that there is no better recipe for membranes for large, ocean-going yachts.



Every resin used in a D4® Premium membrane contains UV inhibitors and anti-microbial additives to maximise the life of your D4® Premium membrane. Woven surfaces ("taffetas") are treated with top coatings containing both titanium dioxide and anti-microbial agents for unequalled protection from UV and mildew.

Description/Hrs exposed	0	200	400	600
DIMENSION-POLYANT Taffetas	100%	96%	94%	92%
DIMENSION-POLYANT UV films	100%	97%	94%	91%
Generic Taffeta	100%	91%	85%	81%
Generic Film	100%	86%	77%	70%





© Banks Sails

D4[®] – FASTLINE

It is an unfortunate fact that as sails have become more high tech and customised the delay between a sailor ordering and taking delivery of their new sail has increased. Dwell times associated with the curing of roll good laminates, a factor invisible to the sailor when laminated sailcloth is solely made for inventory, suddenly become extremely visible when production can only commence after the order is placed.

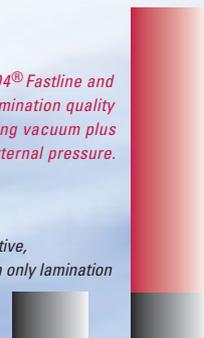
D4[®] Fastline, employing a quick curing adhesive system, addresses this problematic membrane production queue issue and provides an enormous improvement in delivery time from which sailors can reap huge benefits.

The solvent free resin system associated with D4[®] Fastline allows for a simplified production process which enables D4[®] Fastline to be very reasonably priced relative to D4[®] Premium. As a solvent free yarn laying process, it's also more environmentally friendly.

Whilst attractively priced relative to the Premium product, Fastline takes no short cuts with yarn geometry and the same attention to detail that goes into every D4[®] Premium membrane also goes into D4[®] Fastline. D4[®] Fastline is available both in Competition (film/film) and Cruise (taffeta/taffeta) versions for sails from 15 to 75 square metres (162 to 807 square feet).

Superior D4[®] Fastline and Premium lamination quality utilising vacuum plus external pressure.

Alternative, vacuum only lamination



FASTLINE



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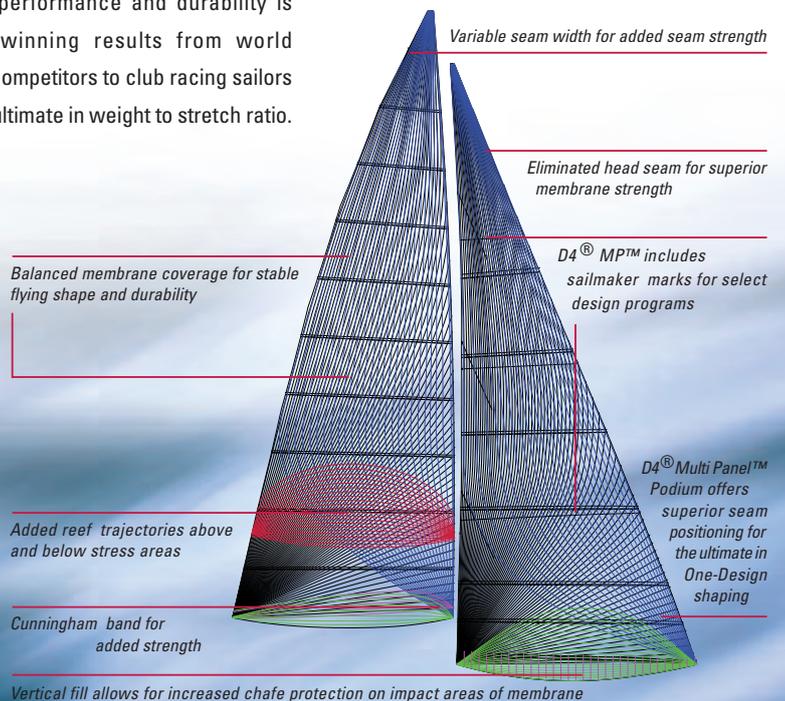
D4® – MULTI PANEL™

The D4® Multi Panel™ product line is DIMENSION-POLYANT's most recent addition within the D4® family of membranes for yacht sails. D4® Multi Panel™ membranes are most suitable for boats up to 40 feet.

D4® Multi Panel™ is designed to manufacture membranes in a speedy, highly automated manner employing advanced lamination and custom yarn trajectories. Multi Panel™ employs laid high modulus fibers which are load-path oriented and laminated between two layers of film. Taffeta and Internal Taffeta versions are available as well.

The D4® Multi Panel™ line offers a more precise draft profiling for the membrane owing to the multiple seams of the Multi Panel™ configuration. This feature is most useful in sails used on boats under 40 feet, where more shaping is required. DP's patented roll good lamination, as applied in the production of the custom layout of a Multi Panel™, provides a quality superior to most membranes found in the market place at such a price level. The resulting performance and durability is reflected by winning results from world championship competitors to club racing sailors looking for the ultimate in weight to stretch ratio.

With this new product offered within the D4® family, sailors around the world can now choose from the most comprehensive membrane range to find the correct sail solution for every yacht. Although D4® Multi Panel™ is visually different from D4® Premium and D4® Fastline in panel size and yarn distribution, the performance elements of the sail membrane is maintained.



MULTI PANEL™

Continuous product development of DIMENSION-POLYANT's entire product range ensures the perfect sailcloth is available for the regatta and cruising enthusiast. D4[®] Custom Load Path Membranes is DIMENSION-POLYANT's latest product line addition and allows sailors around the world to choose the right sail for the right application – from woven polyesters through traditional laminates to D4[®] Custom Load Path Membranes. DIMENSION-POLYANT always guarantees the highest level of quality for all of its products, owing to vertically integrated and complete in-house production at facilities located in Germany, the United States and in Australia.

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