

CHALLENGE AILCLOTH

6.18 Performance Cruise

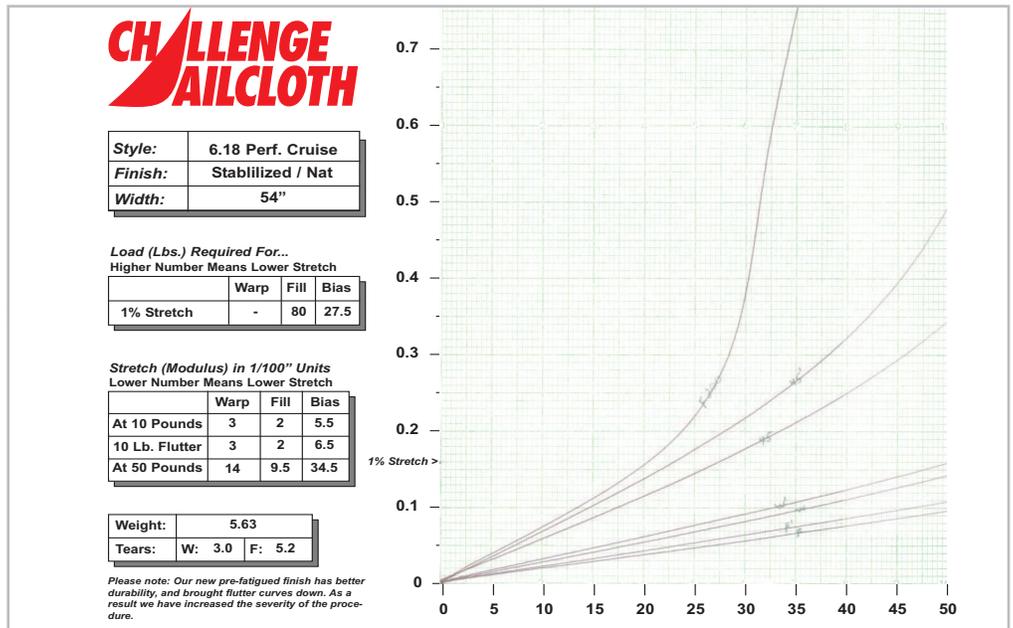


Performance Cruise is the newest line of fabrics designed to fit all cruising needs. They use new higher shrink / higher tenacity warp yarns for higher thread counts and better shape durability, and larger deniers to best resist UV degradation. Constructions are low aspect in light to medium weights, and higher aspect in the heavier styles which experience highest loads. Heavier weight fills are Honeywell 1W70, one of the 2 best sailcloth yarns made. (Other is Fiber 104). We test all yarns using a proprietary MIT Phd. designed sailfiber test. Performance Cruise is woven on the newest looms. Thus weaving quality is second to none

Construction

- Performance Cruise is specifically designed for durable cruising sails. 6.18 is a fine weave high count construction. It is engineered to have maximum number of yarn crossings, for bias and weave stability and durability. In this weight range, the 6.68 is a larger warp denier alternative for Maximum UV resistance

- 6.18 is a very high warp count of 150 x 450 denier. It's warp count of almost 160 inch, combined with high fill, make it finer weave than other coarser 6 oz cruising fabrics.
- Total fiber in warp is almost equal to the fill, but warp yarns are so densely packed that the fill is straight and "crimplless, and thus lower stretch.



Finish

- Available in Medium Firm spec of 2-9.
- The fabric is heat-set, shrinking up to 20%. The STABILIZED finish is achieved by immersing the fabric in a bath of suspended resin. The resin is absorbed by the fiber. The cloth is then fed into a long oven where the liquids are driven off, leaving resin solids bonded to fibers. The fabric is shrunk under high heat, further tightening the weave, and calendered at high tonnage to further stabilize the bias.
- Finishing in house: Challenge is the largest American sailcloth manufacturer to process its own fabric.

Applications

- For use in mainsails or jibs on boats up to 28'; for # 1 genoas on up to 35 footers, lt. #1 to 45'; #2's on 25'.

6.68, 7.38, 7.88, 8.88, 9.88, 10.88, and 11.88 have large denier yarns, in proportion to their weight, in both directions. Such massive yarns maximize resistance to UV degradation, tear, breaking and abrasion.

Other Performance Cruise styles have finer weave, and higher yarn counts. The higher number of yarn linkages maximize bias stability and fabric life.