

CHALLENGE AIRCLOTH

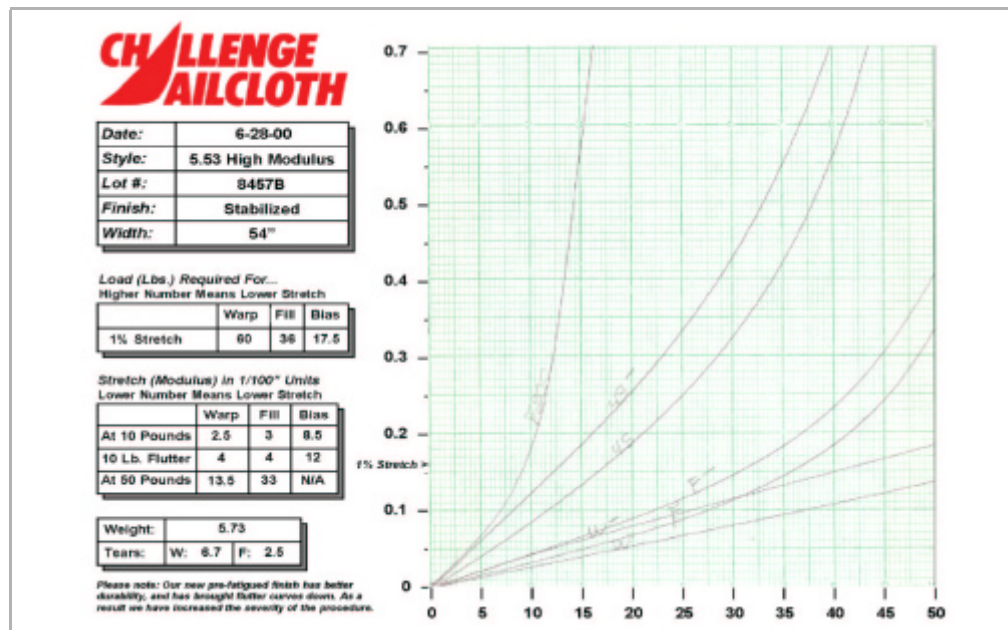
5.53 High Modulus



Challenge Sailcloth's High Modulus Weaves are high performance racing, and highest end cruising fabrics. They feature tight weaves of very high counts of warp yarns (high sleys), and highest modulus, highest shrink Dacron[®] 52 or Honeywell (AlliedSignal) 1W70 fill yarns in most weights (where available). These superior fibers (the finest that money can buy) best resist high leech loads in Crosscut Sails. High Modulus Weaves compare extremely favorably to the top constructions made by our competitors, who use little to no Dacron 52 and 1W70.

Construction

- 5.53 has a very high warp count of 250 denier fiber in warp and fill. The high sley (number of warp yarns) makes straight "tunnels" which make the fill yarn very straight. (Low "crimp") This takes maximum advantage of the very high modulus or low stretch fill yarn.
- Warp to fill ratio of 1 : 1 makes this "balanced denier" fabric a low Aspect Weave.
- Fill has low crimp, but high count warp makes this fabric an excellent radial weave.
- Actual weight is 5.8 Oz. per Sailmaker's Yard.



Finish

- Our STABILIZED finish is achieved by immersing the fabric in a bath of suspended resin. The resin is absorbed by the fiber. The cloth is fed into an oven where the liquids are driven off, leaving resin solids bonded to fibers. The fabric is heat-set several times, methodically shrunk at high temperature, further tightening the weave, and calendered at high tonnage to further stabilize the bias.
- Available in Firm spec of 3-9, or Medium Firm 5-15: See "Stretch in 1/100" Units", "At 10 lbs" on graph.

Applications

- 5.53 is for #2 and #3 genoas on 20-25' boats, for heavy #1 genoas on 25-30 footers, for medium #1's on 30-34 footers, and for light # 1 genoas on 34-39 foot boats.

