



## CLOTH INSIGHT

**T**ri-radial A-sails maximize cloth stability by aligning the warp threads (those running the length of the cloth) with primary loads. These threads are pre-tensioned during fabrication, so they resist elongation better than the fill fibers, which run at 90 degrees to the warp. The fabric's finish, either a polymer coating (polyurethane or silicone) or impregnated resin, is also key to preventing distortion. To reduce crimp in the fill yarns, spinnaker cloths often have a higher denier per inch (DPI) in the fill than in the warp. Some fabrics, however, can achieve good results with a balanced DPI. The Bainbridge AirX700N, above, has a balanced DPI of 30 x 30 (warp x fill).