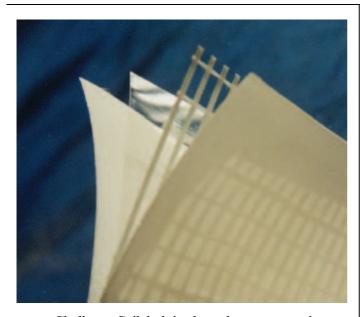
CHALLENGE

PC90 Polyester Cruising Laminate



Challenge Sailcloth is pleased to announce its line of PET polyester cruising laminates. Consisting of layers of fabric / film / scrim / fabric, these fabrics are designed for the sailor who wants the performance of a laminate with the feel and look of a woven.

Fiber / Construction

- PC90 has a scrim construction of 6 x 5 (warp x fill) yarns per inch of 3000 x 500 denier PET polyester.
- The scrim is a laid-up, non-woven matrix, made by a precise machine which inserts yarns with no crimp, so yarn masses efficiently resist stretch.
- There is a total of 2.0 mils of PET polyester film.
- Sandwiching the film and scrim is a beefy 150 denier low crimp PET polyester taffeta on both sides.
- The weight is 9.0 Oz. per sailmaker's yard. (28.5" x 36")

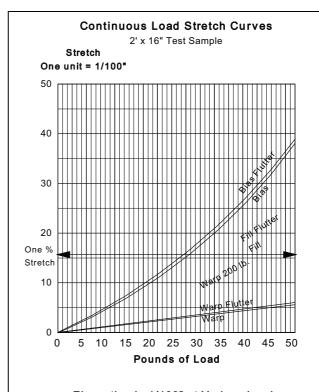
Lamination

- These laminates are processed by Challenge personnel.
- All laminates are tested for adhesion on Challenge's state of the art impact flutter machine. Test samples of

0, 90, and 45 degree directions are smashed at high force onto a platform. After almost 1000 repetitions, the abuse is so severe that laminates with anything but superb adhesion fly apart. Other tests include: wicking, soaking, action-cycled washing, tear, breaking, and abrasion.

Applications

- Radial mainsails and # 3 genoas on boats up to 44 feet
- Medium or heavy # '1's on boats to 62'.
- # 2 genoas on up to 52' boats.



Elongation in 1/100" at Various Loads

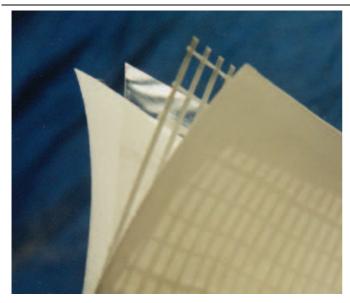
	Warp	Fill	45 Deg.
10 Lb.	1.5	4	5.5
10 Lb Flutter	1.5	4.5	6
50 Lb.	5.5	23	38
50 Lb. Flutter	6	24	40

Lbs. Required to Stretch Sample 1 %

	Warp	Fill	45 Deg.
1 % Stretch	160	38	27.5



PC110 Polyester Cruising Laminate



Challenge Sailcloth is pleased to announce its line of PET polyester cruising laminates. Consisting of layers of fabric / film / scrim / fabric, these fabrics are designed for the sailor who wants the performance of a laminate with the feel and look of a woven.

Fiber / Construction

- PC110 has a scrim construction of 6 x 5 (warp x fill) yarns per inch of 4000 x 500 denier PET polyester.
- The scrim is a laid-up, non-woven matrix, made by a precise machine which inserts yarns with no crimp, so yarn masses efficiently resist stretch.
- There is a total of 2.0 mils of PET polyester film.
- Sandwiching the film and scrim is a beefy 150 denier low crimp PET polyester taffeta on both sides.
- The weight is 10.2 Oz. / sailmaker's yard. (28.5" x 36")

Lamination

 All laminates are tested for adhesion on Challenge's state of the art impact flutter machine. Test samples of 0, 90, and 45 degree directions are smashed at high force onto a platform. After almost 1000 repetitions, the abuse is so severe that laminates with anything but superb adhesion fly apart. Other tests include: wicking, soaking, action-cycled washing, tear, breaking, and abrasion.

Applications

- Radial mainsails and # 3 genoas on boats up to 62 ft.
- Back ends (PC90 up front) of med, hvy. # '1's on boats to 70'. # 2 genoas on up to 65' boats.

