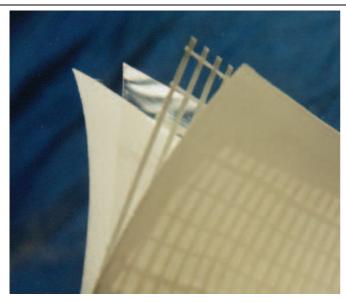


## PC75 Polyester Cruising Laminate



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**

- (PC75 has a scrim construction of 6 x 5 (warp x fill) yarns per inch of 2000 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 1.5 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 7.7 Oz. per sailmaker's yard.28.5" x 36")

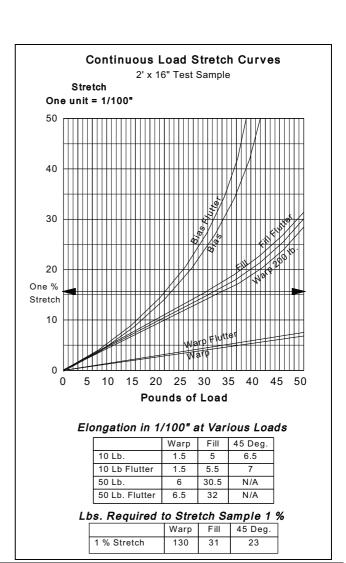
#### Lamination

• 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.

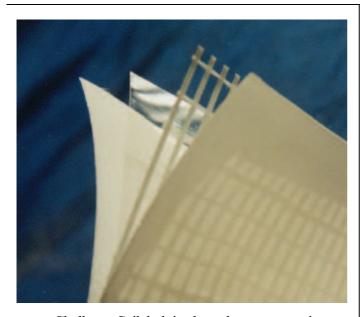
### **Applications**

- Radial mainsails and # 3 genoas on boats up to 41 feet.
- Light # '1's on boats to 62'.
- #2 genoas on up to 48' boats.



# 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")

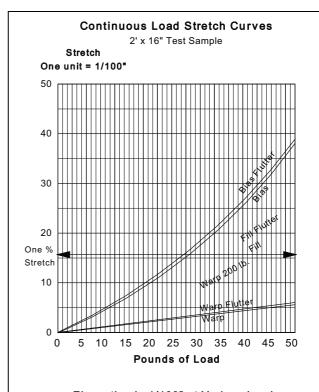
#### Lamination

- 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