

APEN 6

APEN 12

APEN 18

APEN 24

ACL 6

ACL 12

ACL 18

Pentex has grown in popularity as the performance fiber for many one design classes, Contender Sailcloth has extended its range of Pentex fiber laminates to include taffeta backed styles as well as taffeta sandwich cruising laminates featuring our Pentex by Pentex scrim.

Pentex fiber has over twice the modulus of conventional polyester, meaning it will stretch half as much given the same load. Pentex also has the same flex strength as polyester so sail durability is not compromised. And Contender Pentex scrim uses 100% Pentex fiber in a three-way yarn axis – warp, fill, and bias- so you can be assured of getting optimal strength from your Contender Pentex fabric. Less stretch in the warp and fill directions with greater bias stability for better shape holding properties.

Depending upon your specific sailing requirements, Contender makes a Pentex laminate right for your application. Choose from the lightweight, film on film APEN range when racing performance is key. These styles feature light weight and low stretch. For added durability, the taffeta backed APEN-T styles fit nicely into the racer-cruiser inventory. Whether on a furler or in a foil, the APEN-T fabrics can provide a performance edge with durability. For performance cruising sails, the ACL PEN styles combine the strength of our Pentex by Pentex scrim with the extra durability of our rugged polyester taffetas on both sides of the laminate. Greater shape holding strength means a wider working range for your sail so you can cruise more efficiently.

#### **Features:**

- **Zero-Zero crimp superimposed construction eliminates crimp in warp and fill**
- **Graduated fill count for better fabric strength and durability**
- **High density off angle scrim offers improved off-threadline performance**
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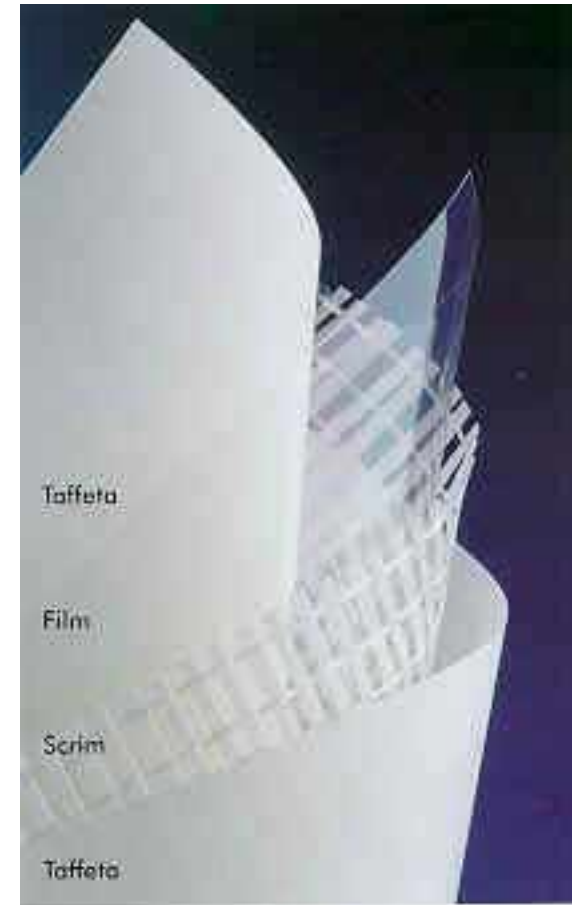


## CRUISE LAMINATES

Style	Mil	Weight	Construction Warp x Fill
ACL 50	1.0 mil	5.6 oz.	1000 Poly x 500 Poly 1.2 oz. + 1.2 oz. Taffeta
ACL 60	1.0 mil	6.3 oz.	1000 Poly x 500 Poly 1.2 oz. + 1.7 oz. Taffeta
ACL 65	1.5 mil	7.2 oz.	1000 Poly x 500 Poly 1.7 oz. + 1.7 oz. Taffeta
ACL 75	1.5 mil	8.1 oz.	2000 Poly x 500 Poly 1.7 oz. + 1.7 oz. Taffeta
ACL 90	2.0 mil	9.2 oz.	3000 Poly x 500 Poly 1.7 oz. + 1.7 oz. Taffeta

## PERFORMANCE LAMINATES : PENTEX CRUISE LAMINATE

Style	Mil	Weight	Construction Warp x Fill
ACL 6 PEN	1.0 mil	6.4 oz.	1000 PEN x 500 PEN 1.2 oz. + 1.2 oz. Taffeta
ACL 12 PEN	1.5 mil	7.6 oz.	2000 PEN x 500 PEN 1.2 oz. + 1.7 oz. Taffeta
ACL 18 PEN	1.5 mil	8.2 oz.	3000 PEN x 500 PEN 1.2 oz. + 1.7 oz. Taffeta
ACL 24 PEN	2.0 mil	9.6 oz.	4000 PEN x 500 PEN 1.2 oz. + 1.7 oz. Taffeta





Formed scrims made with high modulus polyester fibers form the foundation of the Contender polyester laminate range. Untwisted warp yarns are formed into flat bands on either side of 500 denier fill yarns to reduce crimp to a minimum. The result is a fabric that puts yarns directly into tension when the sail loads up, eliminating crimp from the stretch equation. Like the AK and APEN scrims, the heavier polyester styles feature a higher fill denier count for added strength and durability. In the warp oriented styles, these scrims range from 6,000 denier in the warp up to 24,000. The balanced MSB scrims are either 500 x 500 or 1000 x 1000.

The AP, film on film, and APT, film and taffeta, styles are supported with a 35° polyester scrim for off thread line support. This grid serves to improve fabric stability as well as durability and improves tears.strength.

For performance applications where weight is a concern the film on film AP range offers the lightest weight. For added durability but with a compromise on weight, the taffeta backed APT fabrics are the perfect choice. These styles offer increased strength along with the weight so their application ranges are higher than the AP styles.

The ACL cruising laminates sandwich the poly scrims in between rugged polyester taffetas that add to the strength of the cloth and serve to protect the film from flex and impact cracking for long wearing sails. ACL laminates are treated with fungicide to better inhibit mildew growth that can lead to stains. Offered in a wide range of weights, the ACL fabrics can be used for furling genoas and or mainsails on a large variety of boats up to 15 meters (45 feet).

