

DIAX-P

DIAX-60P • 120P • 180P • 240P

DIAX

PERFORMANCE LAMINATES

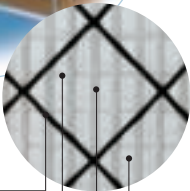
Polyester Laminates



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Laminate Cross Section

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- Polyester Diagonal Axis Ribbons
 - Polyester Fill Ribbons
 - Zero Crimp Polyester Warp Ribbons
 - Film/Film Sandwich

The DIAX-P range of film-on-film polyester laminates is ideal for club racing, small keelboat and sports boat applications.

- ▲ Zero Crimp Warp Scrim: The 0-90 load bearing scrim utilises best quality polyester fibre. The manufacturing technique virtually eliminates warp crimp to further reduce stretch.
- ▲ Stability: The 45 degree polyester DIAX grid forms a diagonal stabiliser to the 0-90 scrim increasing panel stability for improved shape retention.
- ▲ Durability: The DIAX reduces film loading prolonging sail life. It also forms a truss to share load across warp fibres. This reduces the shear effect within the laminate that can cause rapid breakdown of the fabric.
- ▲ Light Weight: The 1.5mil film-on-film construction minimises cloth weight.
- ▲ Technical Support: Performance graphs are available in electronic format via email for all production batches.

Specifications - All Products: 1.5 mil Film, 1370mm/54 inch Wide.

Style	Direction	Construction	Total: dpi	Weight: gsm/smoz	Lab 40lb	Lab 200lb	1% Elongation (lb)	Efficiency
DIAX-60P	Warp	6 x 1000 Polyester	6000	162 3.8	12.8	-	50	14
	Fill	5 x 500 Polyester	2500		20.5	-	33	
	Bias	2 x 2 840 Polyester	3360		24.0	-	29	
DIAX-120P	Warp	6 x 2000 Polyester	12000	201 4.7	9.0	-	70	15
	Fill	4 x 500 Polyester	2000		23.0	-	30	
	Bias	2 x 2 840 Polyester	3360		22.0	-	30	
DIAX-180P	Warp	6 x 3000 Polyester	18000	248 5.8	6.0	-	102	17
	Fill	4 x 500 Polyester	2000		23.0	-	30	
	Bias	2 x 2 840 Polyester	3360		23.0	-	31	
DIAX-240P	Warp	6 x 4000 Polyester	24000	287 6.7	4.5	-	120	18
	Fill	4 x 500 Polyester	2000		21.0	-	38	
	Bias	2 x 2 840 Polyester	3360		21.0	-	34	

Note: Performance data and weights are genuine averages based on a series of production lots.

Applications - DIAX-P

Boat Length	Sail	Main	Light/ Medium #1	Medium/ Heavy #1	#2	#3
20 - 25	Luff	DIAX-120P	SL-500P	DIAX-60P	DIAX-60P	DIAX-120P
	Leech	DIAX-120P	DIAX-60P	DIAX-120P	DIAX-120P	DIAX-120P
25 - 30	Luff	DIAX-120P	DIAX-60P	DIAX-120P	DIAX-120P	DIAX-180P
	Leech	DIAX-180P	DIAX-120P	DIAX-120P	DIAX-180P	DIAX-180P
30 - 35	Luff	DIAX-180P	DIAX-120P	DIAX-120P	DIAX-180P	DIAX-180P
	Leech	DIAX-240P	DIAX-120P	DIAX-180P	DIAX-240P	DIAX-240P
35 - 40	Luff	DIAX-180P	DIAX-120P	DIAX-180P	-	-
	Leech	DIAX-240P	DIAX-120P	DIAX-PP180P	-	-
40 - 45	Luff	-	DIAX-180P	DIAX-180P	-	-
	Leech	-	DIAX-180P	DIAX-PP240P	-	-

DIAX-PP-P

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DIAX PERFORMANCE LAMINATES

Polyester Laminates



© Owen Sails



Laminate Cross Section

Polyester Diagonal Axis Ribbons

Polyester Fill Ribbons

Zero Crimp Polyester Warp Ribbons

Film/Taffeta Sandwich



The DIAX-PP-P range of film-on-taffeta fabrics is designed to provide greater strength and durability than standard DIAX-P equivalents. This is achieved through substituting one of the film layers for a lightweight woven taffeta.

DIAX-PP-P products are ideal for club race applications where extending the competitive life of the sail is a greater priority than ultimate lightweight.

DIAX-PP60P • DIAX-PP120P • DIAX-PP180P • DIAX-PP240P

- ▲ Rugged Performance: A light but tough polyester taffeta backs tri-directional scrims for greater impact resistance compared to film only products. The combination of taffeta and DIAX scrim give this range outstanding durability.
- ▲ Low Stretch Warp Scrim: As with regular DIAX-P the 0-90 load bearing scrim utilizes low stretch polyester fiber. The manufacturing technique virtually eliminates warp crimp providing the finished laminates low stretch characteristics.
- ▲ Stability: The 45 degree polyester DIAX grid forms a diagonal stabilizer to the 0-90 scrim increasing panel stability for improved shape retention.
- ▲ Durability: The DIAX and the taffeta work together to reduce film loading, prolonging sail life. The DIAX scrim also forms a truss to share load across warp fibers. This reduces the shear effect within the laminate that can cause rapid breakdown of the fabric.
- ▲ Technical Support: Performance graphs are available in electronic format via email for all production batches.

Specifications - All Products: 1.5 mil Film, 1370mm/54 inch Wide.

Style	Direction	Construction	Total: dpi	Weight: gsm/smoz	Lab 40lb	Lab 200lb	1% Elongation (lb)	Efficiency
DIAX-PP60P	Warp	6 x 1000 Polyester	6000	218 5.1	9.0	-	66	13
	Fill	5 x 500 Polyester	2500		18.5	-	36	
	Bias	2 x 2 840 Polyester	3360		24.0	-	30	
DIAX-PP120P	Warp	6 x 2000 Polyester	12000	270 6.3	5.8	-	114	18
	Fill	4 x 500 Polyester	2000		20.0	-	38	
	Bias	2 x 2 840 Polyester	3360		22.0	-	30	
DIAX-PP180P	Warp	6 x 3000 Polyester	18000	300 7.0	5.0	-	125	18
	Fill	4 x 500 Polyester	2000		22.5	-	39	
	Bias	2 x 2 840 Polyester	3360		20.0	-	35	
DIAX-PP240P	Warp	6 x 4000 Polyester	24000	330 7.7	4.5	-	150	19
	Fill	4 x 500 Polyester	2000		19.0	-	31	
	Bias	2 x 2 840 Polyester	3360		23.0	-	32	

Note: Performance data and weights are genuine averages based on a series of production lots.

Applications - DIAX-PP-P

Boat Length	Sail	Main	Medium/Heavy #1	#2	#3
20 - 25	Luff	DIAX-PP60P	DIAX-PP60P	DIAX-PP60P	DIAX-PP60P
	Leech	DIAX-PP120P	DIAX-PP120P	DIAX-PP120P	DIAX-PP120P
25 - 30	Luff	DIAX-PP120P	DIAX-PP60P	DIAX-PP120P	DIAX-PP120P
	Leech	DIAX-PP180P	DIAX-PP120P	DIAX-PP180P	DIAX-PP180P
30 - 35	Luff	DIAX-PP180P	DIAX-PP120P	DIAX-PP120P	DIAX-PP180P
	Leech	DIAX-PP180P	DIAX-PP180P	DIAX-PP180P	DIAX-PP240P
35 - 40	Luff	DIAX-PP180P	DIAX-PP120P	DIAX-PP180P	-
	Leech	DIAX-PP240P	DIAX-PP180P	DIAX-PP240P	-
40 - 45	Luff	-	DIAX-PP180P	-	-
	Leech	-	DIAX-PP240P	-	-