



OUTDOOR FABRIC GUIDE

The only durable and waterproof pack fabric made from 100% recycled polyester!

Every yard of ECOPAK™ contains over 20 plastic bottles, and saves over 1 lb. of carbon emissions compared to standard pack fabric.

EPLX | BLUE OCEAN: 100% recycled polyester components, C0 DWR (no fluorocarbons), waterproof 0.5 mil RUV matte film backing, recyclable after use. Compared to other laminated pack fabric with shiny film, Challenge's proprietary RUV matte film is more abrasion resistant, wrinkles less, and is 97% UV resistant.

EPX | GREEN MOUNTAIN: 100% recycled polyester components, C0 DWR (no fluorocarbons), 70d Ripstop backing, recyclable after use. Compared to traditional pack fabric with 50d plain weave backing, the 70d Ripstop has better stitch holding and superior tear strength.

EP | HYBRID: new and recycled components.



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	Content	Components	Weight	Tear Strength ASTM D2261	Waterproof psi / bar	Abrasion ASTM 3884	Width	Minimum yards / order
EPLX200	<i>Lightweight performance, economical price! Good choice for a waterproof liner. As a face fabric in an ultra light pack, use extra reinforcement for bar tacks and daisy chain webbing.</i>							
	100% recycled polyester components	C0 DWR, 200d face, 45° Blue CrossPly, 0.5 mil matte film	4.3 oz/yd ² 145.8 gsm	Warp: 21.2 lb Fill: 17.2 lb	200+ 13.8+	500 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPLX200RS	<i>Lightweight performance of 200d, plus Ripstop to improve tear strength. Very good as waterproof liner. As face fabric, use extra reinforcement for bar tacks and daisy chain webbing.</i>							
	100% recycled polyester components	C0 DWR, 200d Ripstop face, 45° Blue CrossPly, 0.5 mil matte film	4.8 oz/yd ² 164 gsm	Warp: 22.8 lb Fill: 19.7 lb	200+ 13.8+	300 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPLX400	<i>The 400d recycled face fabric has twice the abrasion resistance as standard 420d nylon. Well suited for bags with a separator liner, or stand-alone for high durability at low weight.</i>							
	100% recycled polyester components	C0 DWR, 400d face, 45° Blue CrossPly, 0.5 mil matte film	6.9 oz/yd ² 235 gsm	Warp: 34.4 lb Fill: 26.7 lb	200+ 13.8+	3000 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPLX450RS	<i>For a more technical look, the 450d has a 3 mm (1/8") ripstop grid. Very good stitch-holding and durability at a moderate price.</i>							
	100% recycled polyester components	C0 DWR, 450d Ripstop face, 45° Blue CrossPly, 0.5 mil matte film	7.6 oz/yd ² 257.6 gsm	Warp: 36.7 lb Fill: 28.3 lb	200+ 13.8+	1500 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPLX600	<i>A tight weave and textured yarn gives EPLX600 a supple hand with comparable durability and stitch-holding but double the abrasion resistance of 500d Cordura at a much lower price.</i>							
	100% recycled polyester components	C0 DWR, 600d face, 45° Blue CrossPly, 0.5 mil matte film	8.85 oz/yd ² 300.1 gsm	Warp: 38.4 lb Fill: 30.7 lb	200+ 13.8+	2000 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPLX840	<i>EPLX840 has the look, feel and durability of Ballistic Nylon, in a recycled polyester construction. Great for bag bottoms and other areas of high abrasion.</i>							
	100% recycled polyester components	C0 DWR, 840d Ballistic face, 45° Blue CrossPly, 0.5 mil matte film	9.85 oz/yd ² 334 gsm	Warp: 51.3 lb Fill: 49.5 lb	200+ 13.8+	4400 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPLX1680	<i>For the ultimate in durability, the 1680d gives the look and feel of Ballistic Nylon, in a recycled polyester construction. Great for bag bottoms and other areas of high abrasion.</i>							
	100% recycled polyester components	C0 DWR, 1680d Ballistic face, 45° Blue CrossPly, 0.5 mil matte film	12.3 oz/yd ² 416.9 gsm	Warp: 114.1 lb Fill: 107.3 lb	200+ 13.8+	10200 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds

	Content	Components	Weight	Tear Strength ASTM D2261	Waterproof psi / bar	Abrasion ASTM 3884	Width	Minimum yards / order
EPX70RS	<i>Designed for a small pack or accessory, or a soft-hand liner. For use as a face fabric in an ultra light pack, a heavier bottom panel is recommended for abrasion resistance.</i>							
	100% recycled polyester components	C0 DWR, 70d Ripstop face, 45° Blue CrossPly, 70d ripstop backing	5.05 oz/yd ² 171 gsm	Warp: 17.8 lb Fill: 14.1 lb	200+ 13.8+	300 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPX200	<i>All-around performance at about 20% less than nylon laminated fabric. Good choice for small to mid-size packs, 400/600d is recommended for bottom panels and high abrasion areas.</i>							
	100% recycled polyester components	C0 DWR, 200d face, 45° Blue CrossPly, 70d ripstop backing	5.9 oz/yd ² 200.1 gsm	Warp: 26.7 lb Fill: 24.8 lb	200+ 13.8+	500 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPX400	<i>The 400d recycled polyester has twice the abrasion resistance compared to 420d nylon. Well suited for pack bottoms, or stand-alone for highest overall durability.</i>							
	100% recycled polyester components	C0 DWR, 400d face, 45° Blue CrossPly, 70d ripstop backing	8.95 oz/yd ² 304 gsm	Warp: 37.8 lb Fill: 33.8 lb	200+ 13.8+	3000 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EPX600	<i>A tight weave and textured yarn gives the EPX600 a supple hand with comparable durability and stitch-holding, but double the abrasion resistance of 500d Cordura.</i>							
	100% recycled polyester components	C0 DWR, 600d face, 45° Blue CrossPly, 70d ripstop backing	9.97 oz/yd ² 338 gsm	Warp: 42.6 lb Fill: 39.7 lb	200+ 13.8+	2000 cycles	56 in 142 cm	Stock: 10 yds Custom: 1000 yds
EP50 KC	<i>The most popular kite canopy fabric, the EP50 KC works well as super-light and water resistant bag liner, or an economical tarp.</i>							
	100% woven polyester	50d ripstop with proprietary coating	1.6 oz/yd ² 54 gsm	Warp: 10.48 lb Fill: 12.05 lb	50+ 3.4+	500 cycles	60 in 152.4 cm	White: 10 yds
EP250 LE	<i>World's leading kite board fabric – firm hand, low stretch, excellent tear strength, four times better abrasion resistance than 210d nylon. Single layer, low-cost alternative to laminates.</i>							
	100% woven polyester	250d ripstop with proprietary coating	3.8 oz/yd ² 128 gsm	Warp: 30.05 lb Fill: 28.37 lb	150+ 10.3+	2400 cycles	60 in 152.4 cm	White: 10 yds Black: 10 yds
EP250 Ti	<i>Ripstop weave of EP250 LE, with softer Titanium Dioxide UV coating. Designed as a sail's protective layer for extended ocean passages; good for tarps, high-altitude tents, small packs.</i>							
	100% woven polyester	250d ripstop with proprietary Titanium Dioxide UV coating	3.8 oz/yd ² 128 gsm	Warp: 32.62 lb Fill: 22.19 lb	150+ 10.3+	1200 cycles	60 in 152.4 cm	White: 10 yds
EPL200 Ultra	<i>200d Ultra PE is woven and laminated to recycled, waterproof RUV film. At just 3.5oz/sqyd, it far exceeds the technical properties of any similar weight fabric available on Planet Earth!</i>							
	200d Ultra PE blended with polyester	200d face, 0.5 mil RUV film backing	3.5 oz/yd ² 119 gsm	Warp: 103.1 lb Fill: 133.2 lb	200+ 13.8+	3800 cycles	56 in 142 cm	White: 10 yds Black: 10 yds
EPL400 Ultra	<i>400d Ultra PE (similar to Dyneema) is about 20% lighter, with twice the abrasion resistance of other 400d UPE fabrics. A great all-purpose high modulus pack fabric.</i>							
	400d Ultra PE blended with polyester	400d face, 0.5 mil RUV film backing	4.65 oz/yd ² 158 gsm	Warp: 114.5 lb Fill: 117.6 lb	200+ 13.8+	7600 cycles	56 in 142 cm	White: 10 yds Black: 10 yds
EPL800 Ultra	<i>Doubling the denier of 400d gives EPL800 Ultra the strength to go the distance in the most demanding expedition packs. Nothing else on the market comes close!</i>							
	800d Ultra PE blended with polyester	800d face, 0.5 mil RUV film backing	8.1 oz/yd ² 274 gsm	Warp: 187.7 lb Fill: 161.1 lb	200+ 13.8+	10500 cycles	56 in 142 cm	White: 10 yds