LAYFIELD GEOSYNTHETICS

TECHNICAL SPECIFICATIONS

MIRAFI® HP-SERIES - GEOTEXTILES

High-strength geotextiles extend the expected life of your roads by preventing the mixing of fill and subsoil and reducing the amount of fill required. Specially designed for base course reinforcement and subgrade stabilization for roadways and similar applications, high-strength geotextiles are woven from high-tenacity polypropylene or polyester fibers (or a blend of both).

HP-Series geotextiles are woven polypropylene products that are designed to provide separation, filtration, and reinforcement for a variety of soil stabilization conditions.

Material Properties	July 2024	MIRAFI® HP - Series					
Rev	ASTM	**HP270**	**HP370**	**HP570**	**HP665**	**HP770PET**	**CR440**
Wide Width Tensile MD/CD	D4595 Ultimate	38.5/35.9 kN/m 2,640/2,460 lbs/ft	52.5/47.3 kN/m 3,600/3,240 lbs/ft	70.0/70.0 kN/m 4,800/4,800 lbs/ft	78.8/109.4 kN/m 5,400/7,500 lbs/ft	105.1/140.1 kN/m 7,200/9,600 lbs/ft	105.0/155.0 kN/m 7,200/10,620 lbs/ft
Wide Width Tensile @ 5% MD/CD	D4595	18.6/21.0 kN/m 1,272/1,440 lbs/ft	21.9/22.8 kN/m 1,500/1,560 lbs/ft	35.0/43.8 kN/m 2,400/3,000 lbs/ft	17.5/61.3 kN/m 1,200/4,200 lbs/ft	52.5/61.3 kN/m 3,600/4,200 lbs/ft	21.9/78.8 kN/m 1,500/5,400 lbs/ft
AOS	D4751	600 microns 30 US Sieve	600 microns 30 US Sieve	600 microns 30 US Sieve	425 microns 40 US Sieve	600 microns 30 US Sieve	600 microns 30 US Sieve
Permittivity	D4491	0.60 sec^{-1}	0.80 sec^{-1}	0.50 sec^{-1}	0.26 sec^{-1}	0.70 sec^{-1}	0.40 sec^{-1}
Flow Rate	D4884	1630 $l/min/m^2$ 40 $gal/min/ft^2$	2444 $l/min/m^2$ 60 $gal/min/ft^2$	1222 $l/min/m^2$ 30 $gal/min/ft^2$	815 $l/min/m^2$ 20 $gal/min/ft^2$	2241 $l/min/m^2$ 55 $gal/min/ft^2$	1222 $l/min/m^2$ 30 $gal/min/ft^2$
Roll Size		5.18 m x 114.3 m 17 ft x 375 ft	4.5 m x 91 m 15 ft x 300 ft	4.5 m x 91 m 15 ft x 300 ft	4.5 m x 91 m 15 ft x 300 ft	4.5 m x 91 m 15 ft x 300 ft	4.5 m x 91 m 15 ft x 300 ft

INSTALLATION

Layfield has highly experienced crews and highly specialized sewing equipment suitable for work in the field in all seasons. We also sew prefabricated panels to suit your project. Prepare the surface on which the geosynthetic reinforcement is to be placed. The subgrade should be cleared of all obstacles and proof rolled. The surface should be smooth and level such that any shallow depressions or humps do not exceed 15 cm (6 in) in depth and height. While unrolling the geosynthetic, inspect it for damage or defects and deploy it flat with no wrinkles or folds. The orientation of the geosynthetic is of utmost importance since geosynthetics may vary in strength with direction. Adjacent rolls should be seamed or overlapped as a function of subgrade strength (CBR). For sludge pond covers, the geosynthetic should be sewn together in nearby staging areas, then pulled across the soft sludge, anchored around the edges and backfilled.