

HYDRALINE™ LL40

LINEAR LOW DENSITY POLYETHYLENE – LAYFLAT – MEETS GRI-GM17

RAVEN

PRODUCT DESCRIPTION

Linear low density polyethylene (LLDPE) geomembranes are manufactured with high quality resins providing exceptional elongation, multiaxial stress resistance, and flexibility. HydraLine™ LL40 can be easily heat sealed with hot wedge or extrusion welding technologies.

HydraLine™ LL40 features include good resistance to stress cracking, chemically resistance, and UV stable. It is available in black, white and custom colors with minimum quantities. It is also available in textured versions to enhance friction angles in contact with soil or geosynthetic layers.

PRODUCT USE

HydraLine™ LL-Series is a very flexible geomembrane with high tensile strength, UV stability and conforms well to various surfaces, which performs well in water and waste water applications for commercial and municipal projects, landfill cells, man-made ponds and many other systems.

HydraLine™ LL-Series meets the physical property values as stated in GRI test method GM17.

SIZE & PACKAGING

HydraLine™ LL40 is shipped to job sites in large master rolls tightly rolled on to a heavy core and deployed by on site equipment. Seaming by certified installation technicians occurs in the field by heat fusion welding.



Athletic Field Lining

PRODUCT

PART

HydraLine™ LL40B

HydraLine™ LL40W

APPLICATIONS

- Decorative Ponds & Lakes
- Landfill Liner & Caps
- Golf Course Ponds
- Landfill Caps
- Pond & Lake Liners
- Drop-In Tank Liners
- Vapor Barriers
- Greens & Bunker Liners
- Irrigation Reservoirs
- Containment Pits
- Mining Heap Leach Pads
- Secondary Containment

HYDRALINE™ LL40

LINEAR LOW DENSITY POLYETHYLENE

		HYDRALINE™ LL40			
		IMPERIAL		METRIC	
PROPERTIES	TEST METHOD	TEST VALUE	TESTING FREQUENCY (MINIMUM)	TEST VALUE	TESTING FREQUENCY (MINIMUM)
APPEARANCE	Black, White & Custom Colors Available				
THICKNESS - (MIN. AVG.)	ASTM D5199	40 Mils	Per roll	1.00 mm	Per roll
DENSITY (MAXIMUM)	ASTM D1505/ ASTM D792	0.939 g/cc	200,000 lb	0.939 g/cc	90,000 kg
TENSILE PROPERTIES (MIN. AVG.) ¹ - BREAK STRENGTH - BREAK ELONGATION	ASTM D6693 Type IV	152 lb/in 800 %	20,000 lb	27 N/mm 800 %	9,000 kg
2% MODULUS - (MAX)	ASTM D5323	2400 lb/in	per formulation	420 N/mm	per formulation
TEAR RESISTANCE (MIN. AGE.)	ASTM D1004	22 lb	45,000 lb	100 N	20,000 kg
PUNCTURE RESISTANCE (MIN. AVG.)	ASTM D4833	56 lb	45,000 lb	250 N	20,000 kg
CARBON BLACK CONTENT (RANGE) ¹	ASTM D4218	2.0-3.0 %	45,000 lb	2.0-3.0 %	20,000 kg
CARBON BLACK DISPERSION ¹	ASTM D5596	pass	45,000 lb	pass	20,000 kg

¹ See reference notations for the listed test methods located in the Geosynthetics Research Institute; GRI-GM17 Standard Specification.



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Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage. Limited Warranty available at www.ravenefd.com

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