

# Rowad International Geosynthetics Co.

Series HDPE - Metric

## High Density Polyethylene - Smooth

Rowad's HDPE geomembranes are produced from first quality, high molecular weight resins and are manufactured specifically for containment of fluids in hydraulic structures. Rowad geomembranes are durable and have been formulated to be resistant to chemicals, ultraviolet degradation and leaching additives. The series of geomembranes shown below is based on a minimum average thickness value equal to the nominal thickness, with the lowest individual of 10 values equal to the nominal thickness minus 10%.

Property	Test Method	Frequency <sup>1</sup>	HD075	HD100	HD150	HD200	HD250
Thickness (nominal) [mm]			0.75	1.00	1.50	2.00	2.50
Thickness (min. ave.) [mm]	D5199	Per roll	0.75	1.00	1.50	2.00	2.50
• Lowest individual of 10 values			0.67	0.90	1.35	1.80	2.25
Tensile Properties (min. ave.)	D6693 Type IV (50 mm/min)	6,000 kg					
• Yield Strength [kN/m]			12	16	24	32	40
• Break Strength [kN/m]			21	28	42	56	70
• Yield Elongation [%]	(33 mm gage)		13	13	13	13	13
• Break Elongation [%]	(50 mm gage)		700	700	700	700	700
Tear Resistance (min. ave.) [N]	D1004	12,000 kg	101	135	203	270	338
Puncture Resistance (min. ave.) [N]	D4833	12,000 kg	268	357	536	700	893
Carbon Black Content (range) [%]	D1603/D4218	6,000 kg	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	D5596	12,000 kg	Note 2	Note 2	Note 2	Note 2	Note 2
Density (min. ave.) [g/cm]	D1505/D792	Resin Batch	0.940	0.940	0.940	0.940	0.940
Stress Crack Resistance (min) [hr]	D5397 (App.)	Resin Batch	300	300	300	300	300
Dimensional Stability (max. av.) [%]	D1204	Resin Batch	±1	±1	±1	±1	±1
Oxidative Induction Time [minutes]	D3895	Resin Batch	>100	>100	>100	>100	>100

<sup>1</sup>Testing frequencies are rounded to the nearest full roll.

<sup>2</sup>Carbon Black Dispersion for 10 different views: all 10 in Categories 1 or 2.

*The information contained herein has been compiled by Rowad and is, to the best of our knowledge, true and accurate. This information is offered without warranty. Final determination of suitability for use contemplated is the sole responsibility of the user. This information is subject to change without notice.*

**Black or White surface upon request**

Visit us to [www.rowadgeo.com](http://www.rowadgeo.com) or contact us to [mikem@rowadgeo.com](mailto:mikem@rowadgeo.com)

<http://www.geosynthetic-institute.org/gai.htm>

Damman, Saudi Arabia.

ver FIBf