Specialist Geomembranes

Technical Data Sheet

Landflex HD DWQ - REG 31 Compliant

Landflex HD DWQ - Approved is a High Density Polyethylene liner, available in 5.5m, 5.8m, 7.2m & 7.5m and is certified to satisfactorily meet the quality required by standards EN13361:2005 (reservoirs) // EN13362:2006 (canals) // EN13491:2006 (tunnels and underground works) // EN13492:2006 (liquid waste storage) // EN13493:2006 (solid waste storage) and standard GRI GM-13 for 1.5mm & 2.0mm. In addition Landflex HD DWQ is **UK Regulation 31 Approved for use in contact with Potable Water** where service reservoir lining, impounding reservoir lining and floating covers are required. Product data subject to change without notice.



PROPERTIES	UNIT	HDPE GEOMEMBRANE						TEST METHOD
		0.75mm	1.00mm	1.50mm	2.00mm	2.50mm	3.00mm	
Density with Carbon Black	g/cm^3	> 0.940	> 0.940	> 0.940	> 0.940	> 0.940	> 0.940	EN ISO 1183
Average thickness	mm	1.00 ± 10 %	1.00 ± 10 %	1.50 ± 10 %	2.00 ± 10 %	2.50 ± 10 %	3.00 ± 10 %	EN ISO 1849-2
Break Strength (1)	MPa	30 (≥ 26)	30 (≥ 26)	30 (≥ 26)	30 (≥ 26)	30 (≥ 26)	30 (≥ 26)	
Break Elongation (1)	%	800 (≥ 700)	800 (≥ 700)	800 (≥ 700)	800 (≥ 700)	800 (≥ 700)	800 (≥ 700)	EN ISO 527-3
Yield Strength (1)	MPa	17 (≥ 16)	17 (≥ 16)	17 (≥ 16)	17 (≥ 16)	17 (≥ 16)	17 (≥ 16)	Test Type 5
Yield Elongation (1)	%	10 (≥ 8)	10 (≥ 8)	10 (≥ 8)	10 (≥ 8)	10 (≥ 8)	10 (≥ 8)	
Puncture Resistance (2)	kN	2,4	2,8	4,0	5,4	6,3	7,0	EN ISO 12236
Tear Resistance (1)	N/mm	140 (≥ 135)	140 (≥ 135)	140 (≥ 135)	140 (≥ 135)	140 (≥ 135)	140 (≥ 135)	EN-ISO 34-1
Carbon Black								
Carbon Black Content Black Carbon	%	2 - 3						ISO 6964
Dispersion	-	≤ 3						ISO 18553
Standard OIT (200 ° C, O2, 1 Atm)	min	≥ 100						EN ISO 11357-3
Stress Cracking (SP-NCTL) (1)	h	≥ 400						EN 14576 / ASTM D 5397
Artificial Ageing Reduction Break Elongation	%	≤ 15						EN 12224
Oven Ageing Reduction Break Elongation	%	≤ 15						EN 14575
Water Absorption (2)	%							
24 hours	%	≤ 0.2						EN ISO 62
6 days		≤ 1						
Root Resistance (2)	-	No Perforations						CEN/TS 14416
Stagnation against gases (2)	(m^3/m^2)/ (d.atm)	< 2 x 10^{-3}						ASTM D 1434
Hydraulic Permeability (2)	$m^3/m^2/d$	< 2 x 10^{-6}						EN 14150

of ±5%. Those values between parentheses are the minimum ones required by the norm.
(1) Both directions (longitudinal and transversal) (2) Both sides. All the values are nominal with a tolerance

The information herein is based upon data obtained by the manufacturer and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data. This information is furnished upon the condition that the person receiving it shall evaluate its suitability for the specific application.

BUTEK Tanks
BUTEK Landline

Specialist divisions of Butyl Products Ltd
T: +44 (0) 1277 653 281
E: enquiries@butektanks.co.uk W: butektanks.com
E: enquiries@butek-landline.co.uk W: buteklandline.co.uk