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Shandong University School of Civil Engineering and Water Conservancy Testing Center

Test report Dongxue

Report number: BG-2015-PEM-1210

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entrusting unit	Yangliang Environmental Sanitation Management Center		Order number	WT-2014-PEM-1210	
Sample name	Double smooth HDPE geomembrane		Commission time	2015-12-08	
Sample number	YP-2014-PEM-1210		Sample specifications	0.75mm	
Sample origin	Shandong Haoyang New Engineering Materials Co., Ltd.		Detection time	2015-12-08~2015-12-21	
Test basis	CJ/T 234-2006		reporting time	2015-12-21	
Test items and results					
Test items		establish	Technical indicators	Test results	Individual assessment
Thickness(mm)			≥ 0.75	0.76	Passed
Density(g/cm ³)			and ≥ 0.939	0.945	Passed
-70°C low temperature impact embrittlement performance			pass	pass	Passed
Mountain puncture strength (N)			≥ 240	263 Construction	Passed
Tensile test	portrait	Yield strength (N/mm)	≥ 11	12.5	Passed
		Small breaking strength(N/mm)	>20 profit	26.4	Passed
		Yield elongation (%)	≥ 12	13.3	Passed
		Elongation at break (%)	≥ 700	813	Passed
	Horizontal	Yield strength (N/mm)	≥ 11	12.7	Passed
		Breaking strength(N/mm)	≥ 20	25.8	Passed
		Yield elongation (%)	≥ 12	13.6	Passed
		Elongation at break (%)	≥ 700	808	Passed
Right angle tear strength (N)	Build vertically	≥ 93 studies	105	Passed the test	
	Horizontal		104	Passed	
Water vapor permeability coefficient, g.cm/(cm ² .s.Pa)			$< 1.0 \times 10^{-13}$	5.66×10^{-14}	Passed
Standard oxidation induction time OIT (min)			≥ 100	118.6	Passed
Environmental stress cracking resistance(h)			≥ 300	> 300	Passed
Carbon black content (%)			2.0~3.0	2.26	Passed
Carbon black dispersion			1.2 level ≥ 9 times	> 9	Passed
Dimensional stability(%)	portrait		± 2	0.8	Passed
	Horizontal			0.7	Passed
inspection index meets the technical requirements of CJ/T 234-2006.					
Note: For commissioned testing, we are only responsible for the samples.					
Main testing equipment: WDW-5 small electronic universal testing machine, No. SDSB-137, verification validity period: October 28, 2016.					
DJ3500 Carbon Black Tester, Model SDSB-175, Verification Validity Date: October 28, 2016.					
XCY-II Low Temperature Brittleness Temperature Tester, No. SDSB-173, Verification Validity Date: January 7, 2016.					

Chief inspector: Currently reviewing: Ji Ben

Issued by:

Testing unit: (seal)

Heart middle

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