

TMP GEOSYNTHETICS - Composite Liner

Introduction

TMP Composite Liner is a waterproof material composed of geotextile and geomembrane. It is mainly used for waterproofing and is divided into one layer of geotextile and one layer of membrane and two layers of geotextile and one layer of membrane, etc. The width is 4–8m and the weight is 200–1500g/m². Its physical and mechanical properties such as tensile strength, tear resistance, and puncture resistance are high, and can meet the needs of civil engineering projects such as water conservancy, municipal, architectural, transportation, subway, and tunnel. As it is made of high molecular materials and an aging inhibitor is added in the production process, it can be used in unconventional temperature environments.

Applications

- Landfills, sewage or waste treatment for leakage prevention
- Riverbanks, lakeshore, tailing dams, waste dams and reservoirs, canals, and storage pits (pits, mines)
- Leakage-proof lining of underground structures such as subways, basements, and tunnels
- Roadbeds and other subsoil saline barrier
- Horizontal leakage barrier cover before dams and levee, vertical subsoil barrier, construction embankment, and waste disposal sites
- Fish farms for saltwater and freshwater
- Waterproof layers for the foundations of roads, highways, and railways, as well as expansive soil and clayey soil
- Roof waterproofing

Specifications

Table1 Basic Technical Requirements

Index Properties	Test Method	Units	Values							
■ Tensile Strength (MD/TD)	ASTM D 4632	KN/m	5	7.5	10	12	14	16	18	20
■ Strain @ Standard Strength (MD/TD)	ASTM D 4632	%	30-100							
■ CBR Puncture Strength	ASTM D 6241	kN	1.1	1.5	1.9	2.2	2.5	2.8	3.0	3.2
■ Trapezoid Tear Strength (MD/TD)	ASTM D 4533	kN	0.15	0.25	0.32	0.40	0.48	0.56	0.62	0.70
■ Peel Strength		N/cm	≥6							
■ Resistance to static water pressure			Table2							
■ Vertical permeability coefficient			According to design or contract requirements							

Table2 Rated Value of Static Water Pressure Resistance

Index Properties	Units	Values								
■ Geomembrane Thickness	mm	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0	
■ Resistance to Static Water Pressure	MPa	①	0.4	0.5	0.6	0.8	1.0	1.2	1.4	1.6
	MPa	②	0.5	0.6	0.8	1.0	1.2	1.4	1.6	1.8

① a layer of geotextile and a layer of geomembrane

② two layers of geotextile and a layer of geomembrane

TMP Laboratory is improving continuously with the purpose of assuring reliable quality. TMP Geosynthetics reserves the right to change the product specifications at any time.

