

# CONFORMITY OF PRODUCT

## TME GeoTech EPDM Geomembrane



### Purpose of Usage

EPDM (Ethylene Propylene Diene Monomer) geomembranes are used as highly flexible and durable waterproofing barriers. Their primary purpose is to prevent fluid leakage and protect structures from water infiltration. Thanks to their excellent elasticity, they accommodate ground movements and temperature variations without cracking. They are widely preferred in projects requiring long-term performance and resistance to environmental conditions

### Application Locations

EPDM geomembranes are commonly applied in water containment and environmental protection projects. Typical application areas include reservoirs, irrigation ponds, decorative ponds, canals, landfill caps, and wastewater treatment facilities. They are also used in roofing systems, tunnels, and foundation waterproofing where flexibility and durability are critical.

Properties	Test Method	HDPE-Smooth				
Thickness (min.ave.)	ASTM D 5199 Mm(mil)	0.50 (20)	0.75 (30)	1.00 (40)	1.50 (60)	2.0 (80)
Density	ASTM D 792 g/cm <sup>3</sup>	≥0.94	≥0.94	≥0.94	≥0.94	≥0.94
Tensile Properties (min.ave.)	ASTM D 638 Tipo IV					
Yield Strength	Kn/M(lb/in)	7 (40)	11 (63)	15 (84)	22 (126)	29 (168)
Break Strength	Kn/M(lb/in)	13 (74)	20 (114)	27 (152)	40 (228)	53 (304)
Yield Elongation	%	12	12	12	12	12
Break Elongation	%	700	700	700	700	700
Tear Resistance (min.ave.)	ASTM D 1004 N(lb)	62 (14)	93 (21)	125 (28)	187 (42)	249 (56)
Puncture Resistance (min.ave.)	ASTM D 4833 N(lb)	160 (36)	240 (54)	320 (72)	480 (108)	640 (144)
Carbon Black Content	ASTM D 1603 (%)	2~3	2~3	2~3	2~3	2~3

### Product Features

EPDM geomembranes offer outstanding flexibility even at low temperatures and high resistance to UV radiation, ozone, and weathering. They have a long service life and maintain performance under extreme environmental conditions. The material is highly resistant to punctures and mechanical stress, while its ease of installation reduces labor time and cost. Additionally, EPDM is environmentally friendly and suitable for applications involving potable water.