

**WA S**eries - Vapor barrier system, as an application was developed in Canada almost four two ago and continuous to be one of the most popular applications of the EPDM membrane.

Single-Ply water barrier system is specially designed to protect water penetration through structural gaps in civil constructions. The product is suitable for applications in commercial buildings, residential building, Airport Terminal buildings and any structure where protection from rain water seepage is of prime importance.

## **DESCRIPTION**

The **WA** system is a curved single-ply synthetic membrane made of ethylene, propylene, diene, monomer. Depending on dimensions, the water barrier surface may be seamless. In other situation, seams can be made using adhesive or tapes. The standard gauge thickness of **WA** membrane is 1.0mm and 1.5mm.

## **PHYSICAL PROPERTIES**

- ✓ High elasticity and tensile strength.
- ✓ Water resistant.
- ✓ Temperature stable from 45 °C to 130 °C
- √ Retains its elasticity at low temperature and resistance to temperature shocks up to 250 °C.
- ✓ Excellent resistance to alkali rains, less resistant to oil products. Contact with some kind of oils, petroleum products, hot bitumen and grease must be avoided.
- ✓ Excellent resistance to UV radiation and ozone concentration

## **TECHNICAL PROPERTIES**

Base : EPDM
Color & Finish : Black Plain
Solvents : None
Solids (%) : 100
State : Curved

Storage : Store in cool dry place until use

#### TECHNICAL SPECIFICATIONS - WA WATER BARRIER

NO.	PROPERTY	TEST STANDARD	SPECIFIED VALUES
1	Tolerance on nominal gauge	ASTM D 412	±10%
2	Tensile strength, min., MPa	ASTM D 412	>9.0
3	Elongation at the break, min., %	ASTM D 412	>300
4	Tear strength, min., KN/m	ASTM D 624 Die C	>26.3
5	Factory Seam Strength, Min, Kn/m	ASTM D 816 Method B (Modified)	8.8 or Membrane Rupture
6*	Brittleness Temperature, °C	ASTM D 2137	-45
7*	Puncture resistance, N	ASTM D4833	>133



8*	Resistance to heat ageing (Properties after 670 hrs. exposure@ 116°C)	ASTM D 573	
	Tensile strength, min., MPa	ASTM D 412	8.3
	Elongation at break, %	ASTM D 412	200
	Tear strength, kN/m	ASTM D 624	21.9
	Linear Dimensional Change, Max, %	ASTM D 1204	±1.0%
9*	Ozone Resistance Condition after exposure to 100 pphm ozone in air for 168 hrs @ 40°C (Sample at 50% strain)	ASTM D 1149	No Cracks
10*	Resistance to water absorption, Change in mass, max, after 168 hrs immersion @ 70°C, %	ASTM D 471	+8, -2
11*	Resistance to outdoor (UV) weathering Xenon Arc, 7560 KJ/m² total radiant exposure at 0.70 W/m² irradiance, 80°C blank panel temperature	ASTM G 151	No Cracks, No Crazing
12*	Water Vapor permeability, max, perms	ASTM E 96 (Proc B)	0.10

<sup>\*</sup>Not a routine quality control test due to the time required/complexity of the test. However, all tests are performed on a statistical basis to ensure overall long-term performance of the sheeting.

ASTM D 4637 - Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane (Type I)

**ASTM D 6134** - Standard Specification for Vulcanized Rubber Sheets Used in Waterproofing Systems (Type I)

 $\boldsymbol{\mathsf{ASTM}}\;\boldsymbol{\mathsf{D}}\;\boldsymbol{\mathsf{7465}}$  - Standard Specification for EPDM Sheet Used in Geomembrane Applications (Type I)

# **Product Range:**

Length	Width	Thickness
10 ~ 30.5mtr	Varies	1.00, to 1.50mm

## **Energy & Environment:**

Property	Value
Reflectivity (ASTM C 1549)	0.06
Emissivity (ASTM C 1371)	0.88
Post-Consumer Recycled	0%
Content	
Pre-Consumer Recycled	0%
Content	
Product Guarantee Term	Cover up to 20years