

# APPLICATION

RhinoMat® 1000 a 40 mil (1.0 mm) thick, polyethylene Reinforced Composite Geomembrane (RCG). RhinoMat® 1000 is ideal for containment applications such as agriculture, aquaculture, mining and energy, secondary containment, wastewater lagoons, and landfill covers. Retention applications include golf course ponds, stormwater management, irrigation storage, canal liners, and potable water reservoirs.

PROPERTY	TEST/METHOD	TYPICAL VALUE <sup>1</sup>		MIN. AVE. ROLL VALUE <sup>2</sup>	
		ENGLISH	METRIC	ENGLISH	METRIC
Weight	ASTM D751	20.8 oz./yd <sup>2</sup>	705 g/m <sup>2</sup>	18 oz./yd <sup>2</sup>	610 g/m <sup>2</sup>
Thickness	ASTM D751	40 mil	1.01 mm	36 mil	0.91 mm
Strip Tensile Strength (MD)	ASTM D7003	303 lbf	1348 N	250 lbf	1100 N
Strip Tensile Strength (CD)	ASTM D7003	265 lbf	1179 N	250 lbf	1100 N
Strip Tensile Elongation (MD)	ASTM D7003	22%		20%	
Strip Tensile Elongation (CD)	ASTM D7003	22%		20%	
Tongue Tear (MD)	ASTM D5884	60 lbf	302 N	50 lbf	225 N
Tongue Tear (CD)	ASTM D5884	62 lbf	334 N	50 lbf	225 N
CBR Puncture	ASTM D6241	1400 lbf	6228 N	1000 lbf	4400 N
Index Puncture Resistance	ASTM D4833	242 lbf	1076 N	200 lbf	890 N
Hydrostatic Resistance	ASTM D751	740 lb/in <sup>2</sup>	5102 kPa	700 lb/in <sup>2</sup>	4800 kPa
Dimensional Stability <sup>3</sup>	ASTM D1204	2.86%		3%	
Water Vapor Transmission <sup>4</sup>	ASTM E96 (BW)	0.08 g/m <sup>2</sup> day		< 0.3 g/m <sup>2</sup> day	
High Pressure Oxidation Induction Time <sup>4</sup>	ASTM D5885	>400 minutes		>400 minutes	
UV Resistance (Fluorescent Light Method) <sup>4</sup>	ASTM D7238				
a) Strength & Elongation retained after 10,000 light hours	ASTM D7003	> 90% retained		> 50% retained	
b) High Pressure OIT (minutes average) % retained after 1,600 hours	ASTM D5885	> 50% retained		> 50% retained	
Grab Tensile Strength (MD)	ASTM D7004	463 lbf	2504 N		
Grab Tensile Strength (CD)	ASTM D7004	397 lbf	1766 N		
Trapezoidal Tear (MD)	ASTM D4533	73 lbf	325 N		
Trapezoidal Tear (CD)	ASTM D4533	69 lbf	307 N		
Hydraulic Conductivity	ASTM E96 (BW)	1.0 x 10 <sup>-14</sup> cm/sec			
Carbon Black Content	ASTM D4218	> 2%			
Low Temperature Brittleness	ASTM D2136	Pass (@ -60°F)	Pass (@ -51°C)		
Standard Roll Width		12 ft	3.7 m		
Standard Roll Length		1250 ft	381 m		
Approximate Roll Weight		2200 lb	998 kg		

<sup>1</sup>Typical values are for reference and are not intended as limiting specifications.

<sup>2</sup>Minimum Average Roll Values (MARV) are in accordance with GRI-GM30.

<sup>3</sup>Dimensional Stability MARV is a maximum value in accordance with GRI-GM30.

<sup>4</sup>This test is performed once per formulation in accordance with GRI-GM30.



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# THE STRENGTH OF THE RHINO THE POWER OF OWENS CORNING™



**WELD EASIER.  
INSTALL FASTER.  
CONTAIN BETTER.®**

FOR WATER RETENTION, CONTAINMENT, AQUACULTURE, POND & CANAL LINING APPLICATIONS



# Rhino Mat 1000

## THE STRENGTH OF THE RHINO

### STRONG CONSTRUCTION

- 40 mil (1.0 mm), our thickest geomembrane
- Inner woven core layer provides dimensional stability with impressive tensile and tear strength

### OUTSTANDING PROTECTION

- Puncture, abrasion and chemical resistant construction
- Excellent hydrostatic resistance
- All layers contain UV protection

### MEETS INDUSTRY STANDARDS

- Non-toxic, no PVC or other hazardous materials used in the construction of the geomembrane
- Impressive UV, ozone and oxidation resistance

## THE POWER OF OWENS CORNING™

### GLOBAL BUSINESS LEADER

- Fortune 500® Since 1955
- 3 Global, Market Leading Businesses
- Dow Jones Sustainability World Index

### TECHNICAL EXCELLENCE

- History of Market Changing Innovation
- 11 Science & Technology Centers worldwide
- RhinoLab simulated mfg. line (1:15 scale)

### COMMITMENT TO SAFETY

- Unconditionally committed to occupational health and safety
- A proud member of the National Safety Council since 1943
- Awarded the National Safety Council Green Cross for Safety

## SurFlex™

UV resistant SurFlex™ technology provides excellent welding characteristics, reduces stress cracking and makes it easy to seam in the factory or field

### HDPE HIGH STRENGTH WOVEN CORE

For outstanding dimensional strength and stability

### ENGINEERED LLDPE/LDPE COATING

For flexibility, chemical resistance and protection against UV, ozone and oxidation

## BE WATER SMART.

RhinoMat® 1000 is a 40 mil (1.0 mm) thick, polyethylene Reinforced Composite Geomembrane (RCG), specifically designed for use in water retention and containment applications. The durable, stress crack resistant, lightweight construction provides outstanding performance in many different climates and environmental conditions.

## WELD EASIER.



- Made with SurFlex™ technology, a polyolefin blend surface film which allows for superior thermal fusion welding
- Designed for optimal welding temperature and speed to create exceptional seams
- Flexible construction enables efficient seaming of a wide variety of panel shapes and sizes

## INSTALL FASTER.



- Wide width flexible sheets facilitate factory fabrication to reduce field seaming time
- Factory fabrication helps ensure higher quality welds which require fewer time-consuming destructive field tests
- Allows for customized panels to accelerate installation

## CONTAIN BETTER.



- High strength woven core and engineered coatings provide outstanding longevity and chemical resistance
- Hydrostatic, puncture, and abrasion resistance stands up to the toughest installation, maintenance and environmental stresses