

# Paraseal LG

## A MULTIPLE COMPONENT SHEET MEMBRANE WATERPROOFING SYSTEM.

### Key Benefits Summary

- Multi-layer waterproofing system
- Long life HDPE
- Installation made easy
- Suitable for use with shotcrete

### PRODUCT INFORMATION

#### DESCRIPTION

Paraseal LG is a multi-layer sheet membrane waterproofing system. It consists of a self-sealing, expandable layer of bentonite laminated at the rate of approximately 4.8Kg per square metre to an impermeable, high density polyethylene (HDPE). The third component is a protective layer of spun polypropylene. Together, these three components form a tough, high performance waterproofing membrane manufactured in controlled thicknesses of 4.25mm to 5mm, specially designed for blindside installations such as lagging, under floor and elevator pits. Paraseal LG also withstands applications where shotcrete is blown directly into the face of the membrane.

#### BASIC USES

Paraseal LG is especially effective when waterproofing from the blindside (lagging etc.) where the waterproofing membrane is applied before the walls or floor are poured. It is designed to resist damage from multiple exposure to inclement weather, extremely abrasive concrete pours or direct installation of shotcrete. Paraseal LG will also exhibit outstanding protection against water intrusion in areas of high water heads. Its special weather treatment allows Paraseal LG to be installed for relatively long periods of time before the walls are poured.

#### LIMITATIONS

If groundwater is brackish, consult Tremco. Do not apply in standing water or over snow.

#### PACKAGING

1.2m x 7.4m standard rolls.

**NOTE: This specification data is not complete. Use installation guidelines from the specification manual for detailed information.**

### USAGE GUIDELINES

#### INSTALLATION

For complete details, refer to the appropriate Paraseal LG installation manual. All blindside installations have the bentonite side facing the installer.

#### Preparatory Work:

Examine all surfaces prior to starting application. All spaces between lagging larger than 25mm shall be covered with 6mm plywood prior to installation.

#### Lagging:

Paraseal LG may be installed in a vertical or horizontal direction. Lap joints 75mm shingle fashion (top over bottom) when pouring against, 150mm shingle fashion (bottom over top) when shotcreting against. Trowel Paramastic, TREMproof 60 or Vulkem 201 T around all tiebacks and penetrations. Protect from flooding prior to concrete pour.

#### Earth:

Paraseal LG may be used to cover earth design cuts which are to serve as the external side of a vertical wall form. Overlap joints 100mm to 150mm depending on regularity of soil cut.

#### Buried Forms:

Paraseal LG may be directly attached to forms which are to be left in the earth after the concrete is poured (i.e. elevator pits, sumps, etc.) Overlap joints min 75mm.

#### Under Floor:

Paraseal LG is installed whenever direct contact of the bentonite and floor slab are desired. Paraseal LG will form an instant seal to floor area. Overlap joints 75mm. May be installed over consolidated earth, sand or mud slab.

To establish a moisture vapour protective barrier beneath the floor, all seams are sealed with Permanent Seam Tape.

#### Penetrations:

Tiebacks, tie bolts, misaligned soldier piles, walers and bracking may all penetrate the Paraseal LG membrane. Should this occur, contact your Tremco representative.

#### Protection:

The Paraseal LG dual waterproofing system has a PUNCTURE RESISTANCE of 76.8Kg. and does not require an additional protection course for most applications. For special applications, please contact your Tremco representative for details.

#### Storage:

Protect from moisture. Store on skid or pallet, cover with



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polyethylene or tarp. Do not double stack pallets.

## TECHNICAL INFORMATION

### PHYSICAL PROPERTIES

	Value	Test Method
Pliability: 180 bend over 25mm mandral @ -3°C	10,000	ASTM D146
Tensile Strength: membrane (PSI)		4,000PSI
ASTM D412		
Resistance to microorganisms (bacteria, fungi, mold, yeast)	unaffected	
Elongation - ultimate failure of membrane	700%	D638 Type 4 Dumbell
Puncture Resistance	76.8Kg	FTMS 101B
Resistance to Hydrostatic Head (m of water)	46m	ASTMD751 Method A Footnote #4
Resistance to water migration under membrane: zero leakage	46m/head	Footnote #1
Water migration at or through joint	Instant Seal/ no penetration	Footnote #5
Perm rating	0.03	
ASTME96		
Permeance co-efficient of permeability	2.7 x 10 <sup>-13</sup> cm <sup>3</sup> /cm <sup>2</sup> /sec.	Footnote #4
Cycling over 38mm joint	No deterioration	Footnote #2
Cycling over 6.3mm crack 250 cyc.	No deterioration	Footnote #3
Installation temperatures	-27.5°C to 50°C	
Non toxic: Do not ingest		
Freeze/thaw cycles: No effect before or after installation		
Non Staining		
Resistance to chemicals and gases: Extremely high resistance - contact manufacturer for specific information.		
Life Expectancy: Both high density polyethylene and bentonite have life expectancy measurable in the thousands-of-years.		

### FOOTNOTES FOR TECHNICAL DATA:

1. A 2.5cm diameter hole was cut in the middle of a 8.8cm diameter sample of Paraseal LG. Sample clamped in 7.5cm diameter permeameter, 46m waterhead applies.
2. Membrane placed between 2 clamps 3.8cm apart. Temperature reduced to -27.5°C and clamps are pulled apart to 6.5cm. Cycle repeated between 3.8cm and 6.3cm - 2000 times.
3. Membrane placed between 2 butting clamps. Clamps spread at -27.5°C. Cycle repeated 250 times.
4. Membrane applied to porous stone and placed in permeameter. Pressure increase to equivalent of 46m water head.
5. Test same as #4 only performed at joint.
6. Above values on 20 mil HDPE system.

### TECHNICAL SERVICE

TREMCO has a team of qualified Technical Sales Representatives

who provide assistance in the selection and specification of

products. For more detailed information or service and advice call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

### GUARANTEE/WARRANTY

We warrant our products to be free of defects and manufactured to meet published physical properties when tested according to applicable specifications and TREMCO standards. Under this warranty we will provide at no charge, product to replace any product proven to be defective when applied in accordance with our written instructions and in applications recommended by TREMCO as being suitable for this product. All claims concerning product defects must be made within 12 months of shipment. Absence of such claims in writing during this period will contribute a waiver of all claims with respect to such product. This warranty is in lieu of any and all other warranties expressed or implied.