

# Saltwater Paraseal

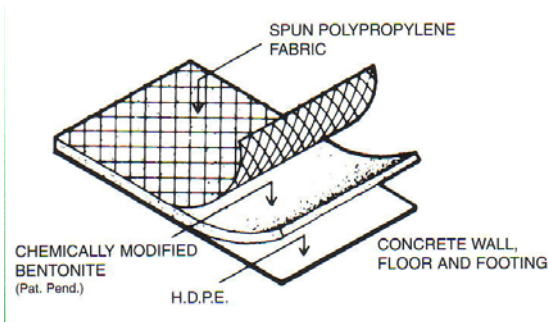
HDPE/Bentonite sheet membrane dual waterproofing system for saline conditions.

## Product Description:

**Saltwater Paraseal** is a multilayer, sheet waterproofing membrane specially designed for waterproofing applications in areas where saline, alkaline, acid, etc. conditions exist. It is a composite sheet manufactured to controlled thicknesses of 3.75mm-5mm composed of tough, high density polyethylene (HDPE) and polymer treated, expandable, quality granular bentonite. The specially treated Bentonite is laminated at a rate of up to 4.5kg per square metre to an impermeable HDPE sheet forming a superior Dual Waterproofing System for application to horizontal and vertical surfaces.

## Basic Uses:

**Saltwater Paraseal** is used to waterproof structures above and below grade in saltwater conditions. It is excellent for use on split slabs, parking decks, poured and block foundations and vertical walls. It has outstanding performance when used under conditions of high water head and installed prior to concrete pour such as retaining walls, lift pits and basement floor slabs.



## Limitations:

Do not install over ponded water, snow or ice. Contact Equus for approval whenever conditions of extreme salt brine, acid, alkali or otherwise contaminated conditions exist.

## Packaging:

1.2m x 7.3m standard rolls. 20 rolls/pallet

## Installation:

For complete details, refer to the appropriate Installation Manual.

## Preparatory work:

Examine all surfaces prior to starting application. Dust may be present. However, all debris must be removed. Standing water and sharp protrusions over 6mm must be removed. Installation may proceed on uncured, damp or frosted surfaces. Saltwater Paraseal is compatible with all currently used release agents.

## Vertical Walls:

Saltwater Paraseal rolls are installed vertically or horizontally with HDPE side facing the installer, by nailing across tops, lapping edges 75mm and nailing vertical seams every 600mm with masonry nails.

Apply Permanent Seam Tape to all seams. Pour a 38mm cover of specially treated **Paragranular** at intersection of wall and footing prior to **Saltwater Paraseal** installation. Compact fill to minimum 85% modified proctor density.

## Under Floor Slab (minimum thickness 76mm):

With bentonite side up, roll out **Saltwater Paraseal**, overlap 75mm and install next roll. Staple together every 203mm. Protect from rain and pour concrete as quickly as possible after installation. **Saltwater Paraseal** is sensitive to non-brackish water.

With HDPE side up, roll out **Saltwater Paraseal**, lapping seams minimum 75mm. Staple every 600mm and tape all seams with Permanent Seam Tape or other specified tape. Pour 38mm covers of specially treated **Paragranular** around penetrations. Prior to concrete pour, inspect and patch any damaged areas.

## Parking and Roof Decks:

Remove debris, lap edges 75mm minimum in shingle fashion working from lower to higher elevation. Staple edges at 600mm centers and tape all seams.

## Lagging:

Refer to **Paraseal LG** data sheet 502 and lagging installation manual.

## Protection:

The **Saltwater Paraseal** dual waterproofing system has a puncture resistance of 76.7kg and does not require any additional protection course for most applications. For special applications, contact your Equus Representative.

## Storage:

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

## Warranty:

Tremco warrants its Paraseal Membranes to be free of defects in materials, but makes no warranty as to appearance or colour. Since methods of application can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of Merchantability and Fitness for a particular purpose, with respect to Paraseal Membranes. Tremco's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of Paraseal membrane proved to be defective and Tremco shall not be liable for any loss or damage including incidental or consequential damages arising from the use of Paraseal Membranes.

**Technical Data:**

<b>Physical Properties</b>	<b>Value</b>	<b>Test Method</b>
Colour: Grey/Black		
Pliability: 180° bend over 25mm mandrel @ -31.7°C	10,000	ASTM D146
Tensile Strength:Membrane (psi)	4,000 psi (27.6MPa)	ASTM D412
Resistance to micro organisms (bacteria, mould, fungi, yeast)	unaffected	
% Elongation-ultimate failure	700%	D638
Dumbbell Puncture Resistance of membrane	76.7kg	ASTM E 154-88
Resistance to Hydrostatic head (Ft. (m) of water)	7.6m	Footnote #4
Resistance to water migration under membrane	Zero leakage	Footnote #1
Water migration at or through joint	Instant seal/no penetration	Footnote #5
Permeance	0.031 Grains/hr*ft*in.Hg.	ASTM E96-92
Cycling over 38.1mm joint	Instant seal/no penetration	Footnote #2
Cycling over 6.4mm crack	No deterioration	Footnote #3
Installation Temperatures	-31.7°C to 54.4°C	

**Non toxic:**

**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 thousands of years.

**Footnotes For Technical Data**

1. A 25mm diameter hole was cut in the middle of a 89mm diameter sample of **Paraseal**. Sample clamped in 76mm diameter permeator, 7.6m water head applied.
2. Membrane placed between 2 clamps 38mm apart. Temperatures reduced to -31.7°C and clamps are pulled apart to 64mm. Cycle repeated between 38mm and 64mm 2000 times.
3. Membrane placed between 2 butting clamps. Clamps spread 10mm at -31.7°C. Cycle repeated 250 times.
4. Membrane applied to porous stone and place in permeator. Pressure increased to equivalent of 7.6m water head.
5. Test same as #4, only performed at joint.

\*Above based on 20mil HDPE/Bentonite System

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