

# **Paraseal®**

## **HDPE/Bentonite Sheet Membrane Dual Waterproofing System**

#### **Product Description**

Paraseal® is a sheet waterproofing membrane consisting of 15 mils of HDPE and expandable, granular bentonite. The composite weight of the material is up to 1.0 lb/sq ft, creating a dual waterproofing system.

#### **Basic Uses**

Paraseal is designed for use on backfilled walls. It may be used on damp or green concrete. Alternative versions of Paraseal are available for lagging, split slab, under slab and methane barrier conditions.

#### **Features and Benefits**

The Paraseal system is a dual waterproofing system. The nature of the Paraseal waterproofing system also allows for installation over green or damp surfaces accelerating the construction process. The bentonite can expand up to 8 times its original thickness to stop water that may make it past the HDPE layer, providing a second layer of protection.

#### **Packaging**

4 ft x 24 ft (1.2 m x 7.3 m) rolls 20 rolls/pallet

#### Installation

Refer to Paraseal Application Instructions and online details for specific application information. The techniques involved may require modification to adjust to job-site conditions. Consult your local Tremco Representative for specific site conditions and requirements.

#### **Storage**

Protect from moisture. Store on a skid or pallet, and cover with polyethylene or tarp. Do not double stack pallets. Prevent hydration of bentonite until the sheet is installed and under recommended compaction.

#### **Availability**

Available from your local Tremco Representative, Tremco distributor or warehouse.

#### Limitations

- Paraseal products require a minimum of 24 psf of compaction/ confinement.
- Paraseal is not to be installed over ponding or standing water or snow.
- If ground water is brackish, please contact your local Tremco Sales Representative four weeks prior to a pending application, and provide a water and/or soil sample for testing purposes in order to determine the correct bentonite formula for your project's application.
- If backfill contains substantial amounts of either lava rock, basalt or any other coarse or highly abrasive materials, a protection course or drainage mat may be required. Contact your local Tremco Sales Representative or Technical Services for details.
- Paraseal 15 mil HDPE is not for use in post-installation submerged conditions.

#### Warranty

Tremco warrants its Products to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of Tremco Product proven to be defective, and Tremco shall not be liable for any loss or damage.

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.



### **TYPICAL PHYSICAL PROPERTIES**

Property	Test Method	Typical Value
Color (Bentonite/HDPE)		Gray/Black
Tensile Properties		
Strength at Break Ib/in.	ASTM D6693, Type IV	59 lb/in.
Strength at Break lb/in.2	ASTM D412	3,915 lb/in. <sup>2</sup>
Resistance to Micro-organisms (bacteria, fungi, mold, yeast)	ASTM D4068	Unaffected
% Elongation – ultimate failure of membrane	ASTM D412 Type 4 Dumbell	500%
Puncture Resistance (load)	ASTM E154	112 lb (50.9kg)
Hydrostatic Resistance (w/perm. seam tape)	ASTM D5385	100+ psi (>231ft/H <sub>2</sub> 0)
Index Puncture Resistance	ASTM D4833	26.97 lb/ft
Resistance to Hydrostatic Head Pressure	ASTM D5385	231 ft of water
Permeance	ASTM E96	0.031 grains/hr*ft² 2.7 x 10 <sup>-13</sup> cm/sec 1.7 ng/Pa.s.m²
Installation Temperatures		-25°F to 130°F (-31.7°C to 54.4°C)
Freeze/Thaw Cycles		No effect before or after installation
Resistance to Chemicals & Gases		Extremely high resistance. Contact Tremco for specific information.
Life Expectancy		Indefinite
All data based upon 15 mil HDPE.		



