



The MiraCLAY™ System

A Cost-Effective Bentonite Clay Waterproofing Solution

MiraCLAY

MiraCLAY is a bentonite clay waterproofing system that is a widely used, cost-effective solution suitable for below grade applications. MiraCLAY panels consist of two layers of geotextile fabric that sandwich a layer of sodium bentonite clay, which swells or hydrates in the presence of water and creates a gasket seal.

MiraCLAY panels are typically overlapped and secured to create a continuous barrier that is resistant to penetration and damage. The panels can also be bent and molded to fit around corners and other irregular surfaces, making them suitable for a wide range of construction applications:

- Pre-applied below-grade applications for foundation walls and underslab
- Post-applied below-grade applications for foundation walls
- Projects with lagging, concrete caisson, or shotcrete retention walls
- Jobs requiring rehab waterproofing
- Projects with zero clearance property line restrictions

Three Formulations:

- MiraCLAY is a bentonite clay waterproofing membrane designed for most below-grade applications.
- MiraCLAY EF is a bentonite clay waterproofing membrane used for applications with brackish water or saltwater.
- MiraCLAY GM is a bentonite clay waterproofing membrane designed with a geomembrane liner used for applications with contaminated soils, soil vapor and groundwater.

Bentonite Clay

Bentonite clay has been used for centuries in waterproofing applications. In ancient times, it was used to construct canals, wells, and other water-related structures.

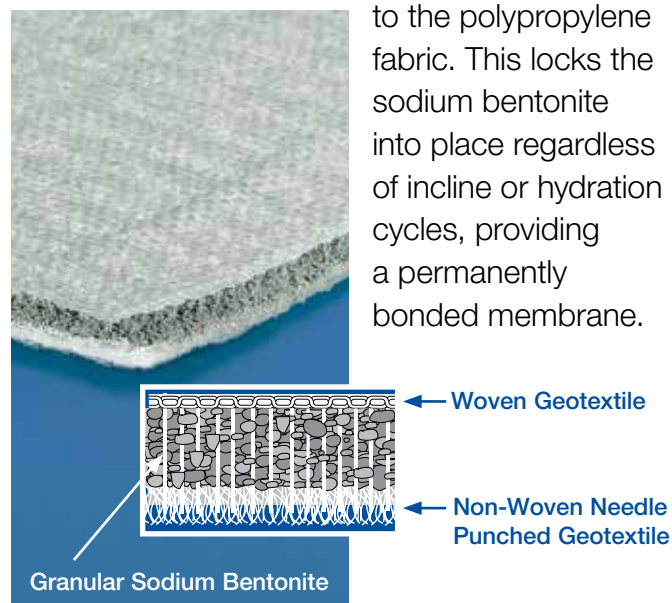
In modern times, bentonite clay has become a popular choice for waterproofing due to its unique properties, including its ability to absorb large amounts of water and expand to create an impermeable barrier.

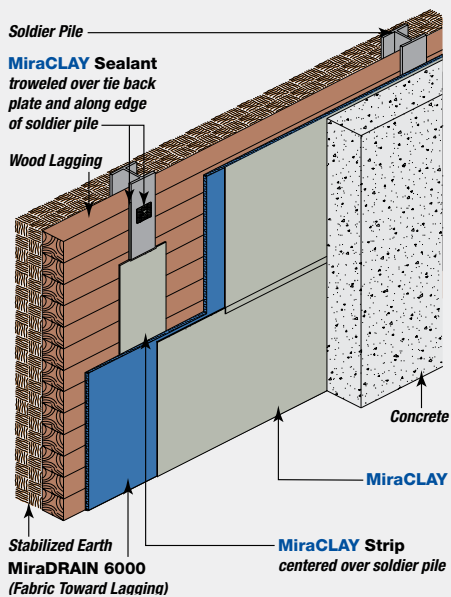
Today, bentonite clay is widely used in a variety of waterproofing applications, including the construction of dams, tunnels, and landfills, as well as in the manufacturing of geosynthetic clay liners. The long history of bentonite clay's use in waterproofing applications attests to its durability, effectiveness, and versatility as a waterproofing material.

Infrabond® Fusion

MiraCLAY offers significant improvements over traditional bentonite cardboard panels. It combines the latest in geotextile technology with the proven waterproofing capabilities of sodium bentonite. The Infrabond process thermally fuses the needle-punched fibers

to the polypropylene fabric. This locks the sodium bentonite into place regardless of incline or hydration cycles, providing a permanently bonded membrane.





MiraCLAY Features and Benefits

- High shear construction
- Impermeable waterproofing barrier when hydrated
- Self-sealing when punctured or penetrated
- Flexible around corners and irregular substrates
- Resistant to most chemicals
- Non-toxic, non-polluting, no fumes
- Economical and installer friendly
- Cold weather application
- Hydrated panel edges prevent material loss during installation
- Compatible with contaminated ground water (salt or chemical)

Typical Properties

Property	Method	Unit	Typical Value
Bentonite Mass/Unit Area	ASTM D5993	lbs/ft ² (kg/m ²)	1.0 (4.88)
Nonwoven	ASTM D5261	oz/yd ² MARV ¹	6.0 (200)
Woven		(g / m ² MARV)	3.1 (105)
Swell Index	ASTM D5890	—	24 ml (2 g) min
Moisture Content	ASTM D4643	% max	12
Fluid Loss	ASTM D5891	ml max	18
Tensile Strength ²	ASTM D6768	lb/in MARV (kN/m MARV)	30 (5)
Peel Strength	ASTM D6496	lbs/in MARV N/m MARV	3.5 (610)
Permeability ³	ASTM D5887	m/s max	5 x 10 ⁻¹¹
Index Flux ³	ASTM D5887	m ³ /m ² /s max	1 x 10 ⁻⁸
Internal Shear Strength ⁴	ASTM D6243	psf (kPa)	500 (24)
Elongation ⁵	ASTM D4632	%	150
Low Temperature Flexibility	ASTM D1970	@ -25°F (-32°C)	Unaffected
Hydrostatic Head Pressure	ASTM D903	ft (meter)	228 (59.49)
Adhesion to Concrete	ASTM 0903	lb/in (kg/cm)	17.7(8)

Limited Warranty

Henry warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any Henry materials prove to contain manufacturing defects that substantially affect their performance, Henry will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by Henry with respect to its materials. There are no other warranties including the implied warranties of merchantability and fitness for a particular purpose.

Henry specifically disclaims liability for any incidental, consequential or other damages including, but not limited to, loss of profits or damages to a structure or its contents arising under any theory of law whatsoever.

The dollar value of Henry's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the Henry material in question.

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Roofing | Air Barrier | Waterproofing

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