

BENTOSURE NW4000

ACTIVE MINERAL BARRIER

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BentoSure is a reinforced (needle punched) GCL which consists of a layer of natural sodium bentonite between two geotextiles. BentoSure adopts unique self-seaming overlaps technology which doesn't require any additional treatment of its longitudinal edges.

MATERIAL PROPERTY	TEST METHOD	TEST FREQUENCY	VALUES
GEOTEXTILES			
COVER LAYER: NONWOVEN	ASTM D 5261	20,000 m ²	200 g/m ²
CARRIER LAYER: WOVEN	ASTM D 5261	20,000 m ²	100 g/m ²
BENTONITE			
MASS PER UNIT AREA ⁽¹⁾	ASTM D 5993	4,000 m ²	3200 g/m ²
FREE SWELL	ASTM D 5890	50 t	24 ml/2g
FLUID LOSS	ASTM D 5891	50 t	18 ml **
MONTMORILLONITE CONTENT	XRD	every batch	80%
CARBONATES CONTENT	XRD	every batch	1-2 % **
GCL			
GCL MASS PER UNIT AREA ⁽¹⁾	ASTM D 5993	4,000 m ²	3500 g/m ²
THICKNESS	EN ISO 9863-1	4,000 m ²	5.5 mm
TENSILE STRENGTH	ASTM D 6768	20,000 m ²	9.0 kN/m
PEEL STRENGTH	ASTM D 6496	20,000 m ²	600 N/m
STATIC PUNCTURE RESISTANCE (CBR)	ASTM D 6241	20,000 m ²	1.8 kN
GCL HYDRAULIC CONDUCTIVITY	ASTM D 5887	weekly	3.0 x 10 ⁻¹¹ m/s **
GCL INDEX FLUX	ASTM D 5887	weekly	8.0 x 10 ⁻⁹ m ³ /m ² /s **
ROLL DIMENSIONS			40.0m x 5.00m (200m ²)

⁽¹⁾ reported at 0% moisture content. All values at 95% confidence level. All values are MARV, except those marked with ** which are MaxARV.

APPLICATION:

- Water reservoirs, dams and river embankments
- Liquid waste disposals sites, transfer stations, secondary containment
- Transport infrastructure
- Canals
- Solid waste storage and disposal sites

ADVANTAGES:

- Self-healing
- Robust construction
- Limited preparation work
- Easy and quick installation
- Long performance

INSTALLATION:

- Unrolled on smooth and compacted subgrade
- Subsequent panels lapped 300mm at leading edges

PACKAGING:

BentoSure is produced in 5m wide x 40m long panels, rolled onto a 100mm internal diameter central core, and protected with a plastic sleeve. Other panel sizes are available on request.

STORAGE:

Provided the rolls are kept inside their protective plastic sleeves, further on-site protection is not required.

SAFETY INSTRUCTION:

There are no special safety measures required for the handling and installation of BentoSure, other than those normally implemented on construction sites. Refer to the installation guide for more information.



This product has been manufactured under the controls established by a Bureau Veritas certification approved management system that conforms with ISO 9001:2015. Bureau Veritas Certification certificate number NZ001832-2

DISCLAIMER

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