

Technical Data Sheet

GDA ActiMat NW50 LP NW50P_80T_85 LP(2) Active Mineral Barrier

Product description

ActiMat is a high specification needlepunched geosynthetic clay liner, comprised of sodium bentonite encapsulated between two or more layers of geotextiles.

ActiMat adopts unique self-seaming overlap technology which does not require any additional treatment of its longitudinal edges.

Technical parameters

PROPERTIES	TEST METHOD	VALUE
<i><u>Physical properties</u></i>		
Total mass per unit area ²	EN 14196	5600 g/m ²
Bentonite mass per unit area ¹	EN 14196	5150 g/m ²
Bentonite mass per unit area ³	EN 14196	4600 g/m ²
Thickness	ISO 9863-1	≥ 8 mm
<i><u>Hydraulic properties</u></i>		
Flux index ^{4,6}	EN 16416	3,5x10 ⁻⁹ m ³ /m ² /s
Permeability ^{5,6}	DIN 18130 /ASTM D5887	1x10 ⁻¹¹ m/s
Bentonite free swell index	ASTM D5890	24 ml/2 g
Water Absorption	ASTM E946	600%
Montmorillonite content ⁷	XRD	80%
CaCO ₃ content	XRD	3 % max
<i><u>Mechanical properties</u></i>		
Tensile strength ⁸	EN ISO 10319	8.5 kN/m
Peel Strength ⁸	ASTM D6496	800 N/m
Static puncture resistance (CBR) ⁸	EN ISO 12236	1.8 kN

¹ average, at 12 % moisture content.

³ bentonite mass at 0% moisture content.

⁵ average, tolerance 0,5x10⁻¹¹ m/s

⁷ Smectite content

² average, at 15 % moisture content

⁴ average, tolerance 0,5x10⁻⁹ m³/m²/s

⁶ test is done with 150 KPa confinement pressure

⁸ average, tolerance 10%

All data at 95% confidence level

Applications:

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

Advantages:

- Self-healing,
- Robust construction
- Limited preparation work
- Easy and quick installation
- Long performance
- All weather installation, including wet and frozen subgrades

Installation:

- Unroll on smooth and compacted subgrade
- Subsequent panels lapped 300mm at leading edges
- don't install in water without consultation

Packaging:

ActiMat is produced in 5m wide x 50m 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 ActiMat, other than those normally implemented on construction sites.