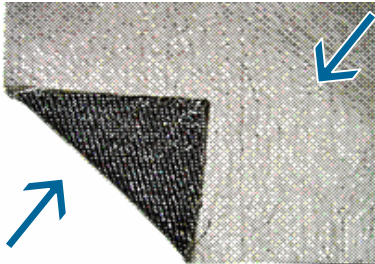


# Data Sheet

## Waterproofing Environmental Protection from Rawell



### non-woven polypropylene geotextile



woven polypropylene geotextile

### RAWMAT<sup>®</sup> HDB Type P2

### Landfill Capping (2m x 50m)

A factory prehydrated sodium bentonite membrane for the encapsulation of landfill sites and waste containment applications .

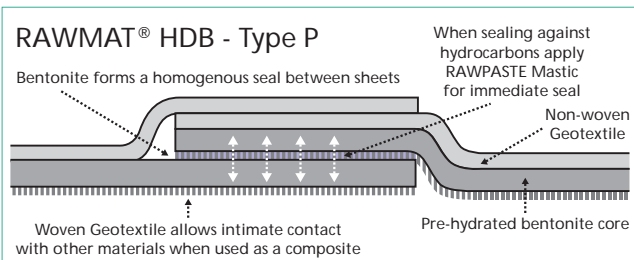
### INSTALLATION

All projects must be assessed on an individual basis as installation details may differ. For project specific recommendations contact the Technical Department at Rawell. Installation may continue during light rainfall providing the backfilling process continues until all of the RAWMAT<sup>®</sup> HDB Type P2 is covered with the correct depth of protective layer.

The prepared surface onto which the RAWMAT<sup>®</sup> HDB Type P2 is to be laid shall be compacted to provide a firm smooth surface free of all ruts, sharp objects, roots, debris, and stones larger than 32mm. The RAWMAT<sup>®</sup> HDB Type P2 is to be placed in the anchor trench (if required by the design engineer) at the top of any slope and laid parallel to the direction of that slope.



The RAWMAT<sup>®</sup> HDB Type P2 shall be laid with the black woven geotextile in contact with the prepared substrate and the grey non-woven geotextile uppermost. Sealed laps shall be achieved by locally peeling back the non-woven geotextile on the ground facing membrane, installing the adjacent sheet, overlapped to a minimum of 150mm, and reinstating the non-woven geotextiles over the entire joint. **Under no circumstances shall the non-woven geotextile form part of the overlap seal. There are to be no transverse joints on slopes.** If necessary please contact Rawell's Technical Sales Department.



At no time during installation of the RAWMAT<sup>®</sup> HDB Type P2 or placing of the protective layer will plant or equipment be permitted to travel on the unprotected surface of the RAWMAT<sup>®</sup> HDB Type P2.

If the anchor trench is required the backfill placed into it is to be well compacted to minimise water intrusion and to prevent the RAWMAT<sup>®</sup> HDB Type P2 being pulled out of the anchor trench. This should take place before any backfilling is started over the main body of the RAWMAT<sup>®</sup> HDB Type P2.

Where an immediate seal against hydrocarbons, contaminants or landfill gases is required a liberal application of RAWPASTE Mastic to the black woven geotextile fabric within the joint shall be made, prior to completing the overlapping (see detail above).

Any necessary venting or stack penetrations through the RAWMAT<sup>®</sup> HDB Type P2 shall be sealed by the application of RAWSEAL TR35 triangular prehydrated bentonite fillet and RAWPASTE Mastic (contact Rawell for site specific detailing) .

In the event of damage occurring to the RAWMAT<sup>®</sup> HDB Type P2, the damaged area shall be overlain by a patch of the RAWMAT<sup>®</sup> HDB Type P2 at least 500mm larger in all directions than the damaged area. Prior to the repair commencing, the area to be overlain shall be cleared of all debris and swept clean.



The grey non-woven geotextiles fabric shall be peeled off the central bentonite core and RAWPASTE Mastic applied across the exposed bentonite core, the patch is then placed in position with the black woven side onto the prepared core/mastic surface and covering the torn area by a minimum of 300mm. The grey non-woven geotextile fabric can then be folded back over the patch and the protective cover layer placed carefully over the remedial works.

The bottom 300mm of the covering material is to be free of all debris, roots, sharp objects, any stones larger than 32mm. The layer is to be placed as part of an ongoing process of the installation of the RAWMAT<sup>®</sup> HDB Type P2 across the landfill capping surface and shall be compacted as a part of this ongoing process.

For details of Rawell products and services visit [www.rawell.com](http://www.rawell.com) where you can find more information suited to your specific needs, or call +44 (0) 151 632 5771

## ADVANTAGES OF RAWMAT HDB

- ✓ Can be laid directly onto compacted earth - no extra geotextiles
- ✓ Simple to install - no need for specialist labour
- ✓ Forms self sealing laps – no need for additional bentonite or taping joints
- ✓ “Active” system - bentonite self heals minor root penetrations
- ✓ Tough geotextile carriers
- ✓ Natural clay base – indefinite life
- ✓ Resistant to chemical attack
- ✓ Non toxic using no solvents or VOC’s
- ✓ Performance can be extrapolated to 100 years at  $< 5 \times 10^{-10}$  m/s
- ✓ Non toxic inert clay central core hydrated before arrives on site
- ✓ Large rolls, simple to handle 100m<sup>2</sup> coverage per roll
- ✓ No welding of laps - simple self sealing overlap
- ✓ No loss of bentonite when cut and handled

## DESPATCH QUANTITIES

1 Roll = 2m x 50m = 100m<sup>2</sup> - Average Weight = 850 kg  
 Approximate Roll Dimensions = 800mm Diameter x 2,010mm Width

28 Rolls (2,800m<sup>2</sup>) capacity per 40 ft Road Trailer/Container  
 28 Rolls (2,800m<sup>2</sup>) capacity per 40 ft Container

\*Weight restrictions vary from country to country due to legislation.  
 Please obtain confirmation from Rawell on territorial transport legislation.

## HANDLING & STORAGE

RAWMAT<sup>®</sup> HDB Type P2 is rolled on 225mm diameter cores. Each roll is sealed in airtight polythene film. The rolls are sheathed in hardboard and banded prior to despatch for protection during transport and handling. Each roll has a unique batch identification code. Rolls must be handled with either a ‘carpet boom’ attachment to a forklift or with a lifting beam, comprising a carrier beam, chains and a spreader bar, supplied by Rawell. The RAWMAT<sup>®</sup> HDB Type P2 shall be stored and handled strictly in accordance with the manufacturers instructions.

The storage area shall be dry and stable. The contractor shall ensure the RAWMAT<sup>®</sup> HDB Type P2 or its packaging is not damaged. Any RAWMAT<sup>®</sup> HDB Type P2 damaged during the delivery, storage or handling shall be rejected and shall not be incorporated in the works. Rolls may be stacked three high in their unopened state.

Once opened, the rolls must be stored under cover or protected with a weatherproof sheet. To prevent rain damage and drying out, any part used roll can be re-wrapped and can be re-used if it has been protected in plastic to prevent moisture loss or saturation from rainfall.

**All information contained within this document is given in good faith and is correct to the best of Rawell Environmental Ltd.’s knowledge. This information is not legally binding and may be changed at any time without notice.**

Rawell Environmental Limited,  
 Carr Lane, Hoylake, Wirral, Merseyside CH47 4AZ.  
 Tel. +44 (0) 151 632 5771 Fax. +44 (0) 151 632 0252  
[www.rawell.com](http://www.rawell.com) E-mail. [postmaster@rawell.com](mailto:postmaster@rawell.com)

