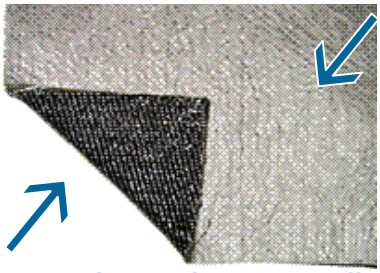
Data Sheet

Waterproofing
Structural Waterproofing from Rawell

non-woven polypropylene geotextile



woven polypropylene geotextile

RAWMAT® HDB Type P1 Structural

(1m x 5m)

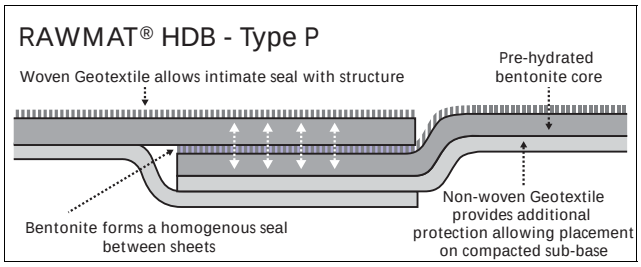
A factory prehydrated sodium bentonite membrane for the waterproofing of below ground structures in accordance with BS8102 : 1990 where no oversite blinding is used beneath the membrane.

INSTALLATION

All projects must be assessed on an individual basis as installation details may differ from project to project. For project specific recommendations and CAD details contact the Technical Sales Department at Rawell.

Due to the thick non-woven geotextile protection to the clay core RAWMAT® HDB Type P1 can be laid on a solid compacted sub-base free of abrupt irregularities with all lumps removed and voids filled. Installation may continue during light rainfall providing the blinding process continues until all of the RAWMAT® HDB Type P1 is covered with the correct depth of protective layer.

The RAWMAT® HDB Type P1 shall be laid with the non-woven polypropylene in contact with the compacted substrate with the black woven geotextile uppermost. In vertical applications the black woven geotextile faces outermost bonding to the concrete poured against it. Sealed laps will be achieved by overlapping the adjacent sheet by a minimum of 100mm, folding back the top layer of the overlap and peeling the non-woven geotextile off the bentonite core before folding the sheet back to form a sealed overlap. **Under no circumstances shall there be any non-woven geotextiles contained within the lap** (see detail). When placed under a slab, the RAWMAT® HDB Type P1 shall protrude beyond the building line by at least 150mm. This provides contact with the vertical membrane ensuring continuity of the waterproofing system.



In vertical application the membrane shall be overlapped using a " roof tiling" principle so that each sheet is overlapped from above to prevent debris from the backfilling process interfering with the bond between the membrane and the structure.

The membrane shall be fixed using Rawmat Soft Washer fixings applied 500mm apart and 100mm below the top edge of the sheet. If necessary, please contact Rawell's Technical Sales Department for more information on the handling and fixing of RAWMAT® HDB Type P1.

For applications where an immediate seal against hydrocarbons, contaminants or gases is required, a liberal application of RAWPASTE Mastic must be made to the woven geotextile within the joint prior to lapping. RAWMAT® HDB Type P1 does not require further hydration to form an effective barrier against these contaminants

In the event of damage to the RAWMAT® HDB Type P1 the damaged area shall be cleaned and overlain by a patch of RAWMAT® HDB Type P1 at least 150mm larger in all directions than the damaged area. Remove the non-woven geotextile from the patch placing the patch black side uppermost and secure using RAWPASTE Mastic or Rawmat Soft Washer fixings.

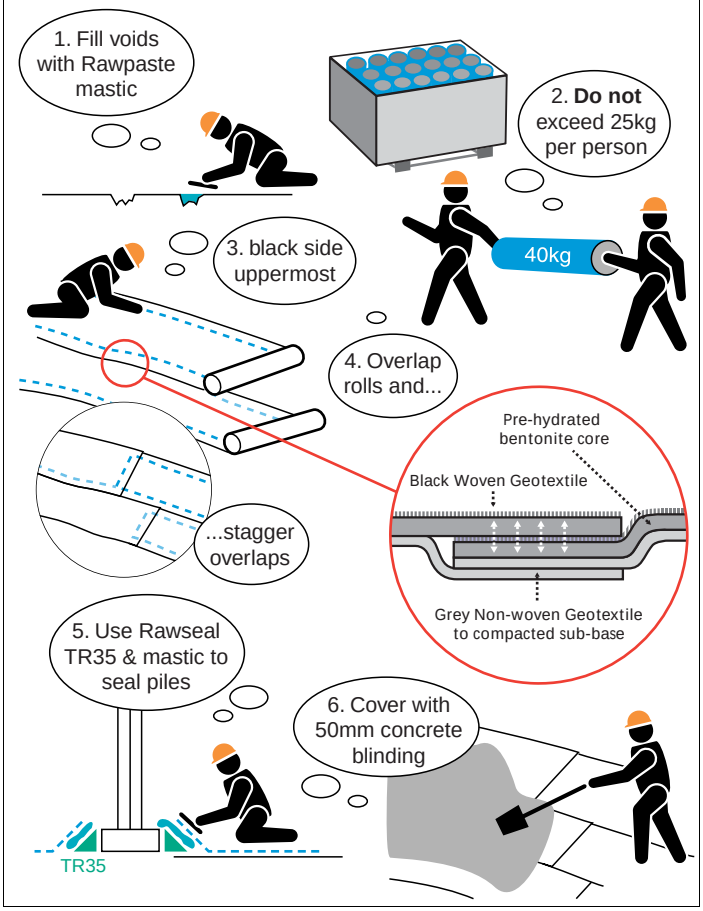
Any necessary penetrations through the RAWMAT® HDB shall be sealed by the application of RAWSEAL® TR35 and RAWPASTE Mastic, which is to be carried out in accordance with the manufacturer's instructions. Plant or equipment must be prevented from traveling on the RAWMAT HDB Type P1 until the approved protection layer has been installed.

At the end of each working day any exposed leading edges of the RAWMAT® HDB Type P1 shall be protected by wrapping in polythene and secured to prevent displacement. When placing blinding or backfill, care shall be taken to ensure that the overlaps are not disturbed or displaced. The protection layer shall be placed in the direction of the overlaps and not against the flow of the joints.

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

Type P1 Structural

Application of Type P1 to a horizontal compacted sub-base



DESPATCH QUANTITIES

1 Roll = 1m x 5m = 5m² - Average Weight = 44 kg
Approximate Roll Dimensions = 210mm Diameter x 1,005mm Width
1 Pallet Box = 25 Rolls = 125m² - Average Weight = 1,150kg
Pallet Dimensions = 1,140mm x 1,140mm x 1,180mm

19 Pallet Boxes (2,375m²) capacity per 40 ft Road Trailer/Container
18 Pallet Boxes (2,250m²) capacity per 20 ft Container

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

HANDLING & STORAGE

RAWMAT® HDB Type P1 is rolled on 50mm cores. Each roll is sealed in airtight stretch film. The rolls are packaged on end into boxes, each box containing 25 rolls. The boxes are sealed with polythene box covers to weatherproof the box. Each box has a unique batch identification code.

The RAWMAT® HDB Type P1 shall be stored and handled strictly in accordance with the manufacturers instructions, given below.

Palletised boxes may be stacked two high in their unopened state. The storage area shall be dry and stable. Any RAWMAT® HDB Type P1 damaged during the delivery, storage or handling shall be rejected and shall not be incorporated in the works.

Once opened the rolls must be stored under cover or protected with weatherproof sheets 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.

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ADVANTAGES OF RAWMAT® HDB

- ✓ Can be laid directly onto compacted earth – no over-site blinding
- ✓ Used against secant piles due to tough non woven geotextile
- ✓ No extended curing or primers required - lays onto wet surfaces
- ✓ Simple to install no need for specialist labour
- ✓ Forms self sealing laps – no additional bentonite or taping joints
- ✓ "Active" system - bentonite self heals minor structural movement
- ✓ Tough geotextile carriers – no need for protection boards
- ✓ Natural clay base – will out live structure to which it's applied
- ✓ Immediate gas & vapour barrier
- ✓ No tracking of liquid between membrane and structure
- ✓ No further on site hydration required
- ✓ Unique environmentally friendly product - no solvents or VOC's
- ✓ Highly resistant to chemical degradation

Type P1 Structural

Application to a vertical compacted sub-base