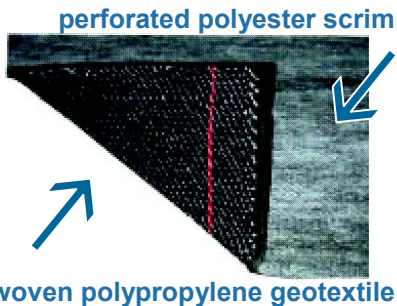


Data Sheet

Waterproofing Structural Waterproofing from Rawell



RAWMAT[®] HDB Type S1 Structural (1m x 5m)

A factory prehydrated sodium bentonite membrane for the waterproofing of below ground structures in accordance with BS8102 : 1990 where an oversite blinding has been specified.

INSTALLATION

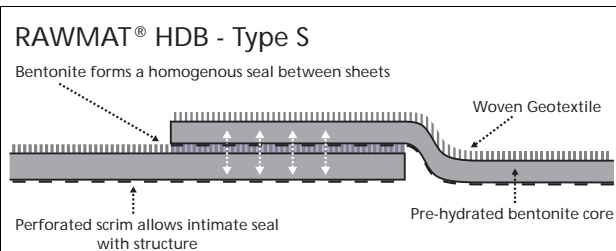
All projects must be assessed on an individual basis as installation details may differ from project to project. For project specific recommendations and CAD details contact the Technical Sales Department at Rawell.

The surface onto which the RAWMAT[®] HDB Type S1 is to be laid shall be smooth concrete, free from abrupt irregularities with all lumps removed and voids filled with mortar or RAWPASTE Mastic. Air hose the surface to clean laitance and dirt to allow a bond to form between the bentonite and the structure. Installation may continue during light rainfall providing the process continues until all of the RAWMAT[®] HDB Type S1 is covered with the correct depth of protective layer.



The RAWMAT[®] HDB Type S1 shall be laid with the non-woven scrim in contact with the blinding concrete and the woven geotextile uppermost. In vertical applications the scrim side is in contact with the structure. Sealed laps will be achieved simply by overlapping the adjacent sheet, to a minimum of 100mm. When placed under a slab, the RAWMAT[®] HDB Type S1 shall protrude beyond the building line by at least 150mm. This provides contact with the vertical membrane ensuring continuity of the waterproofing system. To protect this leading edge, wrap it in polythene and cover with blinding concrete, remove the concrete and polythene immediately before placing the RAWSEAL[®] TR35 fillet and lapping to the vertical membrane.

In vertical applications 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 RAWSEAL[®] TR35 fillet runs continuously around the structure where the membrane protrudes and it is confined at this interface.



The vertical membrane shall be fixed using Rawmat Soft Washer fixings applied 500mm apart and 100mm below the top edge of the sheet. Alternatively, the membrane can be fixed using Rawtite Rapid Bond adhesive at an application rate of one "pea sized" drop onto the face of the membrane every 500mm.

If necessary please contact Rawell's Technical Sales Department for more information on fixing of the RAWMAT[®] HDB Type S1.

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 prior to lapping. RAWMAT[®] HDB Type S1 does not require further hydration to form an effective barrier against these contaminants.

Any necessary penetrations through the RAWMAT[®] HDB Type S1 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.



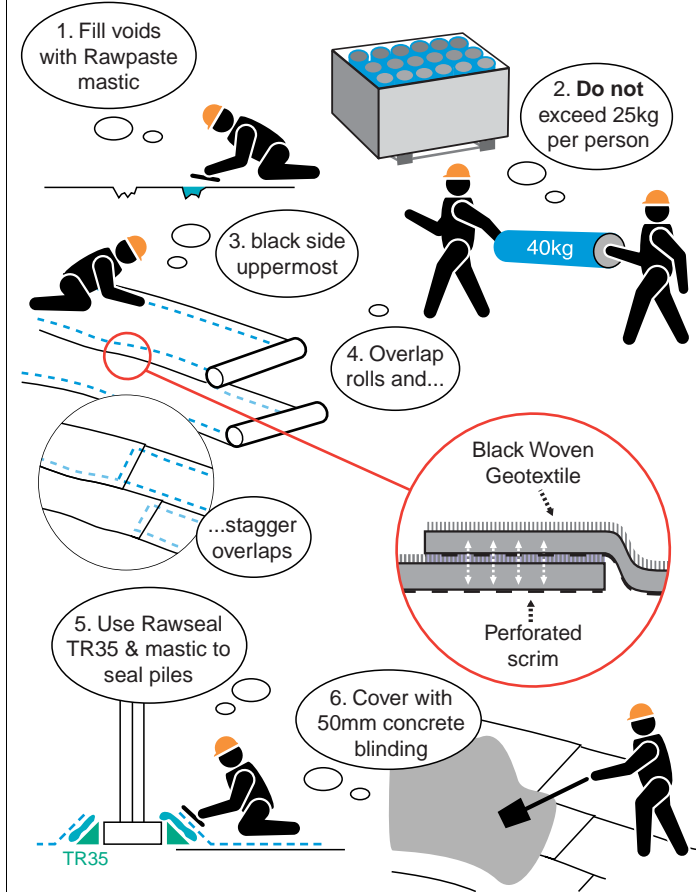
In the event of damage occurring to the RAWMAT[®] HDB Type S1 the damaged area shall be cleaned and overlain by a patch of RAWMAT[®] HDB Type S1 at least 150mm larger in all directions than the damaged area. This should be secured using RAWPASTE Mastic or Rawmat Soft Washer fixings (on vertical applications only).

At the end of each working day any exposed leading edges of the RAWMAT[®] HDB Type S1 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 S1 Horizontal Fixing

Application of Type S1 to a horizontal blinded concrete surface



DESPATCH QUANTITIES

1 Roll = 1m x 5m = 5m² - Average Weight = 40kg
 Approximate Roll Dimensions = 200m Diameter x 1,005mm Width
 1 Pallet Box = 30 Rolls = 150m² - Average Weight = 1,250kg
 Pallet Dimensions = 1,140mm x 1,140mm

19 Pallet Boxes (2,850m²) capacity per 40ft Road Trailer
 19 Pallet Boxes (2,850m²) capacity per 40ft Container
 18 Pallet Boxes (2,700m²) capacity per 20ft Container

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

HANDLING & STORAGE

RAWMAT[®] HDB Type S1 is rolled on 50mm cores. Each roll is sealed in airtight stretch film. The rolls are packaged on end into boxes, each box containing 30 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 S1 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 S1 damaged during the delivery, storage or handling shall be rejected and 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.

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.

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ADVANTAGES OF RAWMAT[®] HDB

- ✓ 1m x 5m rolls easy to handle so speed up installation
- ✓ 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 S1 Vertical Fixing

Application of Type S1 to a vertical surface

