

# Outline Specification

## Mapei Mapeproof HW N, BDA Agrément accredited waterproofing bentonite sheet for vertical and horizontal surfaces on underground structures.

<b>Introduction</b>	This specification is for the application of Mapei Mapeproof HW N onto suitable blinding or laid for pre-applied vertical surfaces.	
<b>Surface Preparation</b>	The surfaces must be even and free of protrusions or voids. The substrates may also be damp but without pools of water.	
<b>Application on horizontal surfaces</b>	Lay with all adjoining edges overlaying a minimum of 100mm and stagger the roll ends a minimum 300mm.. Avoid 4 corners in one location. Fix in place along the laps using nails and Mapeproof CD washers approximately every 350mm.	
<b>Application on vertical surfaces</b>	Mapeproof HW N is designed to be 'peel-adhered' to concrete to form an integral mechanical bond with the concrete to be waterproofed and will therefore require installation to the inside of the formwork before concrete placement.	
<b>Detailing</b>	Penetration through the membrane such as pipework or reinforcement, joints, void or localised repairs can be sealed using Mapeproof Mastic N or Mapeproof Seal N.	
<b>Roll size</b>	5.0 x 1.15m	
<b>Shelf life</b>	All products should be stored under cover in dry conditions. Protect from humidity, water, and frost.	
<b>Application Temperature</b>	0°C to +40°C.	
<b>Additional system components</b>	Mapeproof Seal N Mapeproof Mastic N Idrostop B25 N	Polyfond Kit Drain Mapeproof CD Washer
<b>Additional information</b>	Please consult Health & Safety, system, product and application data or contact our Technical Services Department on 0121 5086970 or email <a href="mailto:technical@mapei.co.uk">technical@mapei.co.uk</a> .  If you require a full NBS, letter recommendation, further specification information or standard details, please email <a href="mailto:specifications@mapei.co.uk">specifications@mapei.co.uk</a>	

### Technical Information:

Mapei Mapeproof HW N, third party accredited waterproofing bentonite sheet for vertical and horizontal surfaces on underground structures.

## PRODUCT IDENTITY

<b>Appearance/material:</b>	Mapeproof HW N is an active waterproofing membrane of high-strength geotextiles encapsulating a layer of sodium bentonite. It consists of two geo fabrics, a non-woven & woven geotextile which are needle-punched together to provide a robust and flexible delivery system.
<b>Dimensions of roll:</b>	1.15m x 5m
<b>Weight per roll:</b>	33kg 35 rolls per pallet (201.25m <sup>2</sup> / 1.155kg)

## TECHNICAL PERFORMANCE

### MAPEPROOF HW N

Geotextiles: Non-Woven	EN ISO 9864	200g/m <sup>2</sup>
Geotextiles: Woven	EN ISO 9864	100g/m <sup>2</sup>
Total Mass per unit of GCL (1) (2)	EN ISO 14196	5300g/m <sup>2</sup>
Bentonite Mass per unit area (1)(2)	EN ISO 14196	5000g/m <sup>2</sup>
Thickness	EN ISO 9863-1	8.0mm
Bentonite free swell index	ASTM D5890	24ml/2g
Water Absorption		600%
Tensile Strength (MD/CMD) (4)	EN ISO 10319	8.0 kN/m
Static Puncture Resistance (CBR) (4)	EN ISO 12236	1.5kN

### MAPEPROOF MASTIC N

Appearance:	Paste
Density (kg/dm <sup>3</sup> ):	1.5
Behaviour in water	Bentonite hydrates freely and swells
Composition:	50% sodium bentonite 50% Non-toxic plasticising agents

### MAPEPROOF SEAL N

Sieve residue (200 mesh 75 µm) (%):	20-24
Moisture content (%):	10-12
Montmorillonite (XRD) (%):	> 95
Free swelling (ASTM D5890) (ml/2g):	> 27
Fluid loss (ASTM D5891) (ml):	< 18
Absorption of methylene blue (mg/g):	> 400
Liquidity limit (UNI 10040) (%):	> 550
Water absorption (ASTM E946/43) (%):	> 750
1500/1000 Marsh viscosity:	38-40"
pH of filtered water:	9
Thickness of compression-bending stressed panel (mm):	> 1.5

### POLYFOND KIT DRAIN

Material:	HDPE laminated with a polypropylene needle punch nonwoven.
Thickness – EN ISO 9863-1:	7.5 (±2) mm

Tensile Strength MD/CMD EN ISO 10319:	10/10 (-2%) kN/m
Elongation at Break MD/CMD EN ISO 10319	50/60 (±10) %
Length:	20 (±2%) m
Height:	2-2.4 (±3%) m

MD: Machine direction  
CMD: Cross- machine direction.

### **MAPEPROOF B25 N**

Material:	Sodium bentonite & butyl rubber
Section:	25x20mm
Rolls size:	6x rolls of 5m (30m per box)

#### **NOTICE**

The information contained herein and any other advice, are given in good faith based on Mapei's current knowledge and experience, and are adequate when the products are properly stored, handled and applied under normal conditions, in accordance with Mapei's recommendations. The information only applies to the applications and products expressly referred to herein and are based on laboratory tests which do not replace practical tests and may not fully reflect actual performance on site where application and service conditions will be different. In case of changes in the parameters of the application, such as differences in substrates, temperature and ambient moisture, etc., or in case of different service conditions, consult your local Mapei Technical Assistance prior to using the products. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The specialist contractor is responsible for strictly following the application recommendations contained in the available documentation. Users must always refer to the most recent local Technical Data Sheet for the product concerned which can be obtained from the web-site or local Mapei representative.