



WATER-PERMEABLE PAVING WITH RESPECT FOR THE GROUNDWATER LEVEL

100% NATURAL, 100% NATURAL APPEARANCE, 100% COMFORT RETAINED

The concept of $\rm H_2O$ Natural Clay Paving allows rainwater to infiltrate on the spot. The adapted paved surface and sub-bases allow the water to slowly drain into the subsoil. This is how we relieve the burden on the sewers and maintain the level of our groundwater.

The whole paving system results in a minimum water permeability capacity of 5.4×10^{-5} m/s which is equivalent to the infiltration of a rain shower of 270 l/s/ha, with a safety factor of 2. What that means in concrete terms is that the paving must be able to safely allow the infiltration of a 10-minute rain shower of 270 litres per second per hectare. The capacity is therefore calculated at twice this volume.





THE GENERAL PRINCIPLE OF ACTION

Water-permeable paving is ideal for the attenuation and infiltration or local drainage of rainwater.

Rainwater falling infiltrates the surface via the water-permeable paving and the water-permeable joint filler and laying bed and seeps down to the (sub-)foundations.

The sub-base then provides the necessary load-bearing strength and ensure distribution of the load. The sub-foundations attenuate the water.

The water eventually infiltrates the subsoil, depending on how permeable it is, and thus contributes towards raising the level of the groundwater. The rainwater that does not infiltrate the soil slowly drains off via a drainage pipeline for attenuation and reuse into nearby infiltration systems (e.g. a swale, open channel or pond) or possibly into the sewers.

A geotextile membrane between the subsoil and the sub-foundations can stop small soil particles penetrating the (sub-)foundations. That is certainly recommended with clayey and loamy subsoil.

H₂O NATURAL CLAY PAVING CAN BE USED WITH ALL THE CLAY PAVERS IN OUR RANGE



Ancienne Belgique





Elegantia







Ecological Brick7-size

WHY H₂O NATURAL CLAY PAVING?



USER COMFORT

The function of paving is to improve the level of comfort for every road user. Both for trucks, cyclists and pedestrians as well as for people with walkers, wheeled suitcases and scooters. H_2O Natural Clay Paving is the first water-permeable paving with natural joints.



Water-permeable paving that is constructed using our clay pavers complies with the highest European and Belgian quality requirements, for very high transverse breaking load, wear and tear resistance and low water absorption. Vande Moortel clay pavers also fall into the highest frost resistance class and are therefore extremely durable.



NATURAL RAW MATERIALS

All of our clay pavers are produced using 100% natural raw materials.



CIRCULAR

More than 90% of material can be relayed/reused.



HIGH WATER PERMEABILITY

The water permeability capacity far exceeds the minimum requirement of 5.4 x 10^{-5} m/s.



30% CO, REDUCTION

By using the ecological Brick7 clay paver formats SeptimA and Elegantia.



SOUND COMFORT

People attach a lot of importance to sound comfort, especially in residential settings. Working with a narrow joint means no noise nuisance.

GENERATION +

Vande Moortel clay pavers have a proven lifespan of several generations and can last longer than 100 years.



100% NATURAL APPEARANCE

 $\rm H_2O$ Natural Clay Paving is a compact, high-quality and natural-looking paving with natural colour intensity and fastness. During production, we make maximum use of local and renewable raw materials.

CHOICE OF MATERIAL

A good choice of material is important for a durable build-up that ensures both load-bearing force and permeability.

CRUSHED STONE SUB-BASE



For effective compaction, a fraction of 0/32 with continuous grain distribution is recommended.

VANDE MOORTEL CLAY PAVERS



Vande Moortel clay pavers are ideal for the construction of wa-

ter-permeable paving due to their specific natural character and quality characteristics. In conjunction with the correct joint filling, our moulded clay pavers provide enough space for rainwater to infiltrate the subsoil via the traditional natural joints between the clay pavers. Unlike extruded pavers or concrete pavers, with Vande Moortel clay pavers you are therefore not obliged to work with spacers.

EXECUTION AND MAINTENANCE

For customised advice on the maintenance of your project, please contact our Ceramic Knowledge Centre in Oudenaarde. Together, we can look at your needs based on the construction used, substrate, design and surroundings.

You can make an appointment via your contact or by sending an e-mail to **info@vandemoortel.co.uk**.

H₂O CLAY PAVING SAND



In this system, you need to use right particles sizes are used of top of each layer in order order to achieve

the desired result. It is designed to provide a strong, durable and permanently water-permeable joint filler according to current regulations and recommendations by the Belgian Road Research Centre.

 H_2O Clay Paving Sand is available from Brickworks Vande Moortel in 25 kg bags.

At least 3 to 4 complete rounds of sweeping in need to be carried out for fully filled joints. The joints have been filled properly if the pavers no longer move. After several months of use, it is recommended to carry out an extra round of sweeping in. After that, the joint filling must be checked and maintained on a regular basis.

Indicative consumption:

- approximately 4 m²/25 kg for full sanding of our SeptimA WF
- approximately 3 m²/25 kg for full sanding of our Ancienne Belgique
- approximately 2.5 m²/25 kg for full sanding of our DecimA WF

LAYING BED

It is recommended for H_2O bedding course with a fraction 2/4 or a split with a fraction of 2/6.2 to be

used for the laying bed. It is preferable not to use the fraction 2/8 in order to avoid the risk of the joint split being washed away.



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