

Sports Pitch Drainage

An introduction to geocomposite drainage
systems in sports field applications

• Synthetic & Natural Grass Sports Pitch Drainage System

When used in sports field drainage Pozidrain offers many advantages over traditional pipe and gravel systems. It is compatible with natural turf or synthetic grass sport pitch surfaces and provides drainage, separation, reinforcement and capping in one product.

To guarantee effective drainage, all sport playing surfaces should incorporate a drainage layer beneath the backfill material to collect and drain rain water. Using a geocomposite as a drainage layer offers many advantages over traditional stone drainage solutions.

Pozidrain consists of a high performance single cusped HDPE core with a geotextile filter thermally bonded on both sides to form a highly efficient drainage layer that offers an environmentally friendly alternative to traditional aggregate drainage.

For contaminated sites it is particularly important to provide capping and avoid trenching. Unlike trenches with pipes, Pozidrain covers the whole pitch area and therefore ensures uniform performance with high flow capacity.

When using geocomposites, care should be taken to ensure they are compatible with the backfill material and that they have the hydraulic properties to deliver reliable and sustainable performance.

High drainage capacity

Pozidrain offers high flow capacity that exceeds the flow performance of a 400mm layer of typical drainage stone.

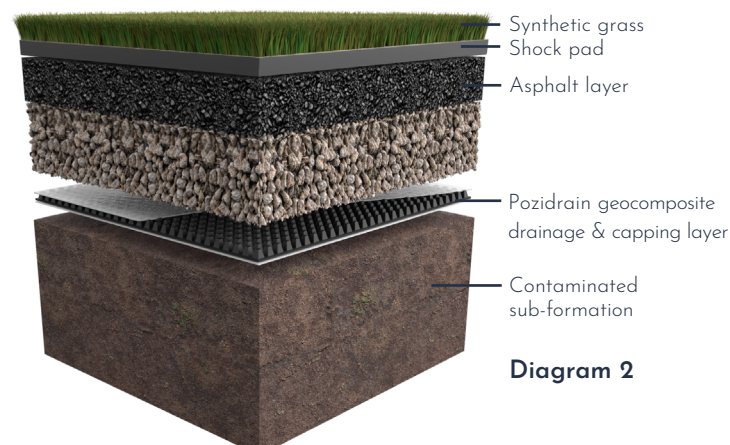
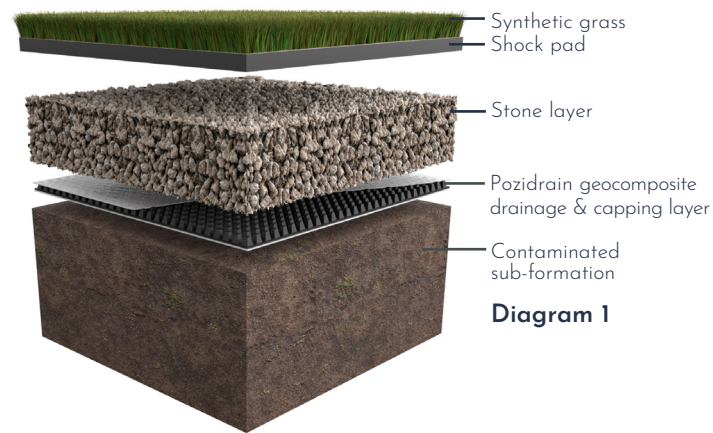
Pozidrain filter fabric pore size is designed to prevent clogging and provide reliable long term performance.

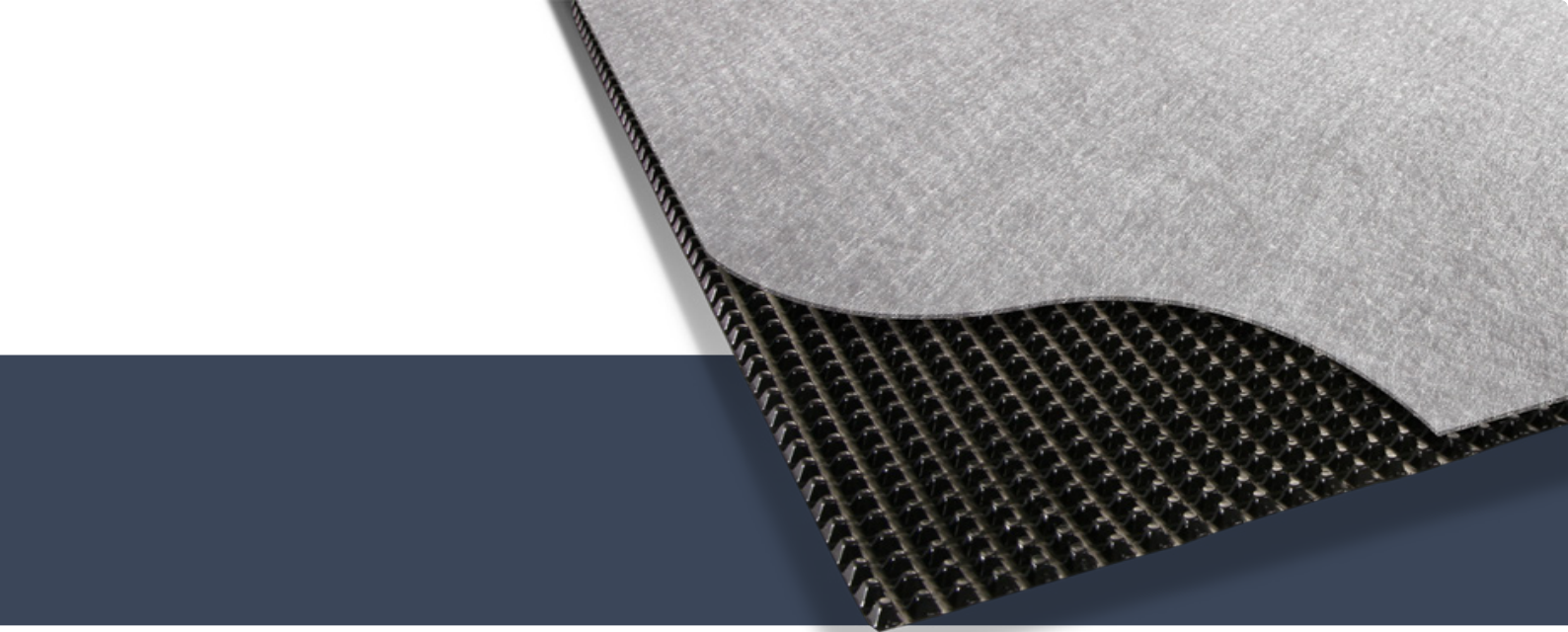
Impermeable back

The core in Pozidrain is formed from impermeable HDPE which, when laid across the entire area, practically prevents water from percolating through to the sub-formation. This helps improve the CBR of the sub-formation for a more stable and consistent playing surface.

During installation, adjacent sheets of Pozidrain SKL are placed with the flat selvedge of the core overlapped and sealed with double sided Abseal butyl tape.

When used on contaminated land Pozidrain SKL provides a capping system to isolate the contamination below and provide a combined drainage sheet and impermeable membrane.





Separation

Using Pozidrain provides separation between backfill material and sub-formation, or in case of contaminated land, between clean backfill and contaminated sub-formation.

Reinforcement

The tensile strength of Pozidrain provides reinforcement which can help control differential settlement across the playing surface. It also ensures that loading is spread evenly over the entire area, essential for achieving consistency in sports pitch surfaces.

Rapid installation

Typically Pozidrain is supplied on large 4.4m x 100m rolls for rapid installation across large areas.

Pozidrain virtually eliminates the requirement for trench and pipe drainage systems, further accelerating the construction programme.

Chemical resistance

Pozidrain has been used extensively in waste management applications to provide leachate drainage (prolonged concentrations of aggressive chemicals within the hazardous waste). Therefore it is adequate for capping applications on contaminated land.

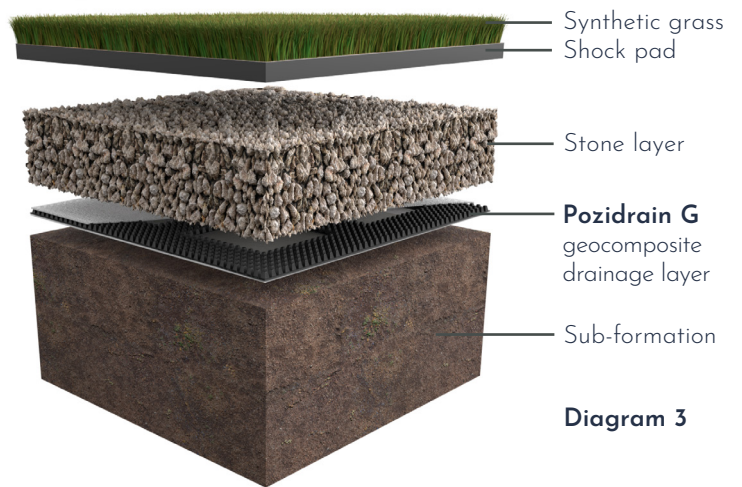


Diagram 3





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