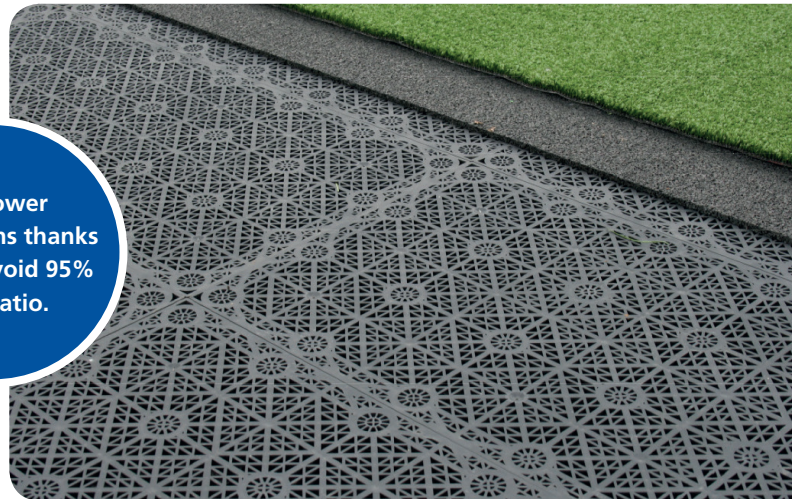


# Permavoid blanket design solution

The installation of Permavoid units are a substitute for the traditional pitch sub-base. These units are installed as a unique inter-locking system which is high strength, designed to provide both lateral and vertical restraint between adjacent units.



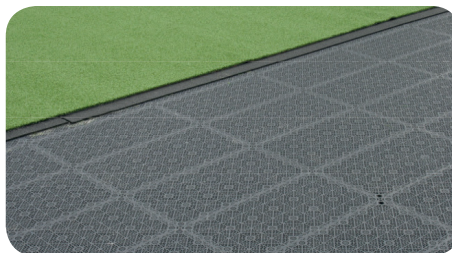
Shallower excavations thanks to permavoid 95% void ratio.



This design solution enables substantial quantities of water to be attenuated within the pitch construction, with no need to install expensive attenuation tanks elsewhere on-site. The Permavoid blanket has a 95% void ratio (much higher than a traditional stone sub-base design).

Unlike other plastic box attenuation systems that have to be installed deep into the ground, our Permavoid units can be installed in shallow excavations. This is a vital advantage because:

- It complies with CDM regulations seeking to 'design out risks'
- It reduces issues if the site has a high water table
- There are lower volumes of soil removal as the depth of excavation will be reduced. This is especially beneficial in cost terms if soil is contaminated or if rock is present
- The units are a manufactured component. This ensures a uniform product, consequently, the success of the sub-base is not reliant on the quality or cost of local quarried stone which varies across the country
- Units are manufactured using recycled material



- Less vehicle movements (one truck of Permavoid units can equate to 21 truck loads of aggregate that would be needed using the traditional design approach!).

Units are manufactured from 90% recycled polypropylene and are 100% recyclable.

## CASE STUDY

### Application

Permavoid blanket design solution

### Contractor

Thornton Contracts

### Product

Permavoid