

Sports Pitch Drainage

Pozidrain, Hampden Park Stadium, Glasgow, UK



CASE STUDY



Project Description

The redevelopment of the iconic Hampden Park Stadium for the 20th Commonwealth Games in Glasgow was lauded as a key achievement during the build up to the event held in the summer of 2014.

The stadium, usually home to the Scottish national football team, was selected as the cornerstone venue for the games, hosting all the flagship track and field events on an IAAF approved track, as well as the opening and closing ceremonies.

It has been well publicised that the stadium, in its usual format, didn't allow space to integrate the running track and infield games areas. To allow construction of the required facilities, an innovative solution involving the construction of a podium deck was designed. This deck increased the floor level within the stadium by two meters and created a sufficient floor area to allow the construction of the running track and in-field.

The Challenge

Integrating a drainage layer within the sports field construction was a key challenge for the design team. Efficient drainage of sports facilities is essential to allow the events to continue, regardless of the weather. Traditional drainage techniques requiring free-draining stone layers were not suitable for this scheme, adding both too much weight on the podium deck and too much depth to the overall construction.

Project Information

Client	Glasgow 2014 Commonwealth Games
Contractor	Malcolm Construction
Product	Pozidrain 7S250D
Quantity	7,000m ²
Benefits	<ul style="list-style-type: none">• High flow capacity in all directions• Impermeable back HDPE core• Reduced materials handling on site• Reduced delivery vehicle movements• Reduced loading on podium deck• Rapid installation



ABG Pozidrain 7S250D

ABG LTD

E7 Meltham Mills Road, Meltham, Holmfirth, HD9 4DS • +44 (0)1484 852096 • www.abgltd.com

a Bontexgeo Group company

Sports Drainage

Pozidrain, Hampden Park Stadium, Glasgow, UK



The Solution

The solution chosen by the project design team was **Pozidrain 7S250D** from ABG. Pozidrain is a high performance drainage composite comprising a cusped core with impermeable back and integral geotextile filter fabric. The fabric allows the free flow of water into the free draining void formed by the high strength core. The result is a highly efficient drainage system at a fraction of the depth and weight of a stone drainage layer. Pozidrain was installed across the entire podium deck area, before being covered over with the sport pitch build-up.

The ABG Service

ABG provided design assistance, drainage capacity calculations, outlet points spacing, overlap details and optimised roll sizes for rapid installation.



Podium deck raised 2m above original pitch to give wider footprint to accommodate race track



Selected Pozidrain light, safe and easy to install



Environmentally friendly Pozidrain removes the need for heavy expensive drainage stone

ABG LTD

E7 Meltham Mills Road, Meltham, Holmfirth, HD9 4DS • +44 (0)1484 852096 • www.abgltd.com

a Bontexgeo Group company