

Edgbaston Cricket Ground practice nets

Saturated ground, Test Match



Edgbaston Cricket Ground had a major standing water problem with their Practice nets, that are also used for Test Matches. The profile of the ground was clay loam with no existing drainage in place. Infiltration rates were less than 1mm per hour and frequently the nets were unplayable. We were invited to work with the Sports Turf Research Institute (STRI) to design a ECO-90™ system to finally solve the problem of saturated ground.

INTRODUCING THE ECO-90™

“The ECO-90™ is a much welcome technology in drainage, enabling us to deal with nuisance groundwater at source. Recently we had 15mm of rain fall in a half-hour – normally that would mean the ground would be unplayable the next day. The ECO-90™ system dealt with the resultant standing water within hours and the ground was completely dry.”

Gary Barwell, Head Groundsman, Edgbaston CC

System Design

We installed 313 ECO-90s™ along four lines across the Practice Ground, using 6m and 12m Primaries, and 1.5 – 3m Secondaries. The drainage was transformed, STRI conducted post-install infiltration rates and found them to have risen to 9mm per hour. As a result STRI classified ECO-90™ as a Primary Drainage System.

£500,000

PROFESSIONAL INDEMNITY COVER

Where we supply and install an ECO-90™ engineered drainage solution we offer an insured warranty, covered by up to £500,000 Professional Indemnity cover. Higher cover is available as required.

In some instances, such as natural turf where we offer our own ECO-90™ drainage design solution and install, we offer a two year defect warranty. This means we will return to site to remedy any problems at our expense.

The ECO-90™ Transforming Drainage Design & Scope

The ECO-90™ is an internationally patented product with unique characteristics that solve a multitude of drainage problems. We launched it in the UK under licence in 2012, since when we have completed over 300 successful installations, from commercial and residential new builds to car parks and cemeteries. We also have our 'Hall of Fame' installs.

Made from high density polyethylene (HDPE), standard drainage extrusion, the unique ECO-90™ design uses a multiple open chamber system that creates lateral (horizontal) water transfer to soil stratas to a depth of over 12 metres (go to www.groundwaterdynamics.co.uk for full information).

Our ethos is that the time has come for a new drainage solution that:

- does not move large amounts of storm water from A to B in conventional horizontal pipes creating problems “down the line”, including the flooding of water treatment facilities that then discharge into critical marine, river and stream ecosystems
- improves the carbon footprint by removing external energy requirements to deal with storm water, with no need for pumps moving water or the energy requirements of treatment works
- stimulates plant growth, creating ECO-90's™ CARBON NEGATIVE standard
- does not take storm water directly off the surface into deep borehole systems creating possible pathways for contaminants.

Instead, we have introduced a drainage system that takes ground water, indirectly, laterally through the ground into an installation of multiple ECO-90s™, **changing the drainage characteristics of soils which previously were unable to accommodate positive infiltration rates.** That's the game changer.



Edgbaston CC



Gleneagles



Royal Ascot



Silverstone

“The ECO-90™ design requires no maintenance, has no mechanical moving parts and needs no external energy requirement to function. It uniquely harnesses soil based gravitational pressure, porosity and waters enthusiasm to keep on moving.”

“The unrivalled result is that a ECO-90™ installation uses the entire volume of soil to a depth of 12m below the ground for water drainage, creating a massive volume of earth to deal with storm water. For new build sites this results in less area for drainage, more for building and higher GDVs.”