

THE BUNKER

Discovering the science of bunker construction and maintenance

Issue 2

Secession first club to install coloured bunker faces



Bold Stacked Sod Styling in Front of the 2nd Green at Secession GC

'Can we have ecobunker in brown?'

asked Secession Director of Golf Operations (and ex PGA Tour player), Mike Harmon.

After playing one qualifying round for the Seniors British Open at Southerndown, in 2014, Mike knew he had found the solution to the eroding bunkers at his home South Carolina Links, but he wanted to go a step further and get everything exactly to his specifications.



Mike is passionate about British Links golf, and he loves the look of the 'burnt off' revetted bunkers you see a lot, especially

in Scotland. This look is created on natural turf by spraying 'round -up' (or similar) on the finished faces, and creates a cleaner brown look, with less grass to cut.

Our synthetic turf creates a greener look, but after some research and development we were able to give Mike exactly what he wanted. The option to colour faces is now an option available exclusively to all our clients should they wish to select it.

The installation project is also worthy of a mention: Secession have an excellent in-house greens team, led by superintendent, Mark Mitchell. They wanted their team to build the bunkers, but needed guidance and leadership from an expert. Step in Llewellyn Matthews.

44 bunkers were renovated during the summer of 2015, then the final phase, comprising all the bunkers on the course and practice area was completed in 2016, all under the supervision of EcoBunker's Llewellyn Matthews. Over 8000 sq ft has been installed, on time, and within budget. Furthermore, Hurricanes Matthew (2016)

and Irma (2017) failed to inflict any damage on the bunker walls.



'Without the skill, leadership and motivation provided by Llewellyn we would not have been able to achieve this. The results are fantastic and during those 3 months here at Secession, Llewellyn has made friends he will keep for life, most notably myself'

Mark Mitchell

Ecobunker enables Sandbelt style bunkers on clay at Sydney's Killara



The Razor Sharp Bunker Edges in the Melbourne Sand Belt are admired across the world

The famous courses of the Melbourne Sandbelt, notably Royal Melbourne and Kingston Heath, are distinctive for many reasons, but one of the most important is the characteristic bunker style created by Dr Alister MacKenzie and his collaborators Alex Russell and Mick Morcom.

Sandbelt bunkers are characterised by their size, by their swooping shape, with capes and bays dividing them up into different compartments, by their flashed sand faces, and by the fact that they cut so deeply into fairways and greens – and are typically presented with short grass – fairway or even green cut – right up to the edge of the bunker.

That look has been enormously influential around the world of golf. Gil Hanse's Olympic course in Rio de Janeiro and Tiger Woods' first American design, Bluejack National in Texas, are only two in a long list of courses said by their designers to be influenced by the Sandbelt look. But replicating those trademark Melburnian bunkers is hard. The soil on the Melbourne courses, though sandy, contains a lot of fine

particles and grey organic matter that mean it binds together to create a hard surface. Coarser sand – and even more so, clay soil – does not bind the same way, and creating that hard, vertical lip so characteristic of Melbourne is basically impossible; the soil gets wet and crumbles away.

Sydney-based golf architect Harley Kruse has found a way round this problem. At Killara Golf Club, in the northern suburbs

of Sydney, a successful 1800 member club whose golf course was basically untouched since the 1960s, Kruse was hired to do a significant course renovation. After careful planning, the works were agreed: reconstruction of all eighteen green complexes, reversing two holes, rebuilding some fairway bunkers and eliminating one par three while bringing a spare hole into the normal rotation.



Edge Maintenance at The Metropolitan GC, Melbourne

“Greens were suffering; the rootzone wasn’t good and they were all poa,” Kruse says. “They were small, and basically flat, with very limited strategic value. We have increased their size, with lots more interest; we’ve also taken out 300 big trees and opened up the vistas.”

Kruse and the club wanted sandbelt-inspired bunkers, but the clay soil at Killara meant that was going to be difficult. However, they found a solution. The new bunkers are lined with Capillary Concrete, and feature a high lip, typically 400mm (16 inches) high, constructed using EcoBunker’s patented synthetic bunker edging system. The sand is then flashed up the EcoBunker wall, and the bunker surrounds can be mowed short right to the edge, because of the strength the EcoBunker and Capillary Concrete underpinnings provide.

“If we had tried to do that edge using the site soils, it would crumble away,” says Kruse. “Getting that stable lip in clay soils is very difficult to achieve. But EcoBunker allows us to do it.”



EcoBunker edges at Killara, Sydney.
The sand belt style is now viable anywhere!

Restoration of The Medalist



EcoBunker will lock in Bobby Weed’s design intent for generations

The EcoBunker Construction method is an ideal tool for bunker restoration projects, where the designer’s original intent may have been lost due to erosion, maintenance regime, or a combination of both.

Ex PGA Tour architect, Bobby Weed explains the background to the renovation: “The course, originally built in the early 1990’s, had lost much of its original character. A cornerstone of the project was returning sod wall bunkers to the layout. The natural sod wall bunkers first built –with their sharp edges and clean lines – became victims of erosion. Over time, they were never replaced and the course slipped into a conventional appearance. It might have been no coincidence that many of the original members drifted.

Not anymore. As part of a new bunkering scheme, we relied exclusively on EcoBunker to re-establish the sod walls. Once again, the long and strong lines with strategic angles central to the course’s strategy stood out. Medalist now features a large area EcoBunker face (nearly 7000 sq ft). The impact on playability and

aesthetics has been dramatic. Some of those old members who have had a sneak preview of our renovation have already renewed their membership. Furthermore, Pete Dye, with whom I worked on many projects has inspected the finished work and is highly satisfied’.

After winning the tender to supply, EcoBunker provided training to Contractor LePanto. Llewellyn Matthews flew to Florida for a 9 day long intensive build period. He created a range of different designs, all using the ‘double stacked’ construction method, invented by Richard Allen in 2010, which was first installed at Pyle and Kenfig GC in Wales.



Designing for Fun at Floridian



Butch Harmon may be one of the most respected coaches in the game, however he could be carving out a reputation as a pretty handy designer too, if the reviews of his recently completed 9 hole 'Harmon Course' at The Floridian are anything to go by. Assisted by golf course architecture company Hertford-Norby, and constructed by Duinick Golf, Harmon has introduced some eye catching features into this short course, built into a narrow strip of land between the road and sea inlet.

The club wanted to create something that was fun, but also different to their main, very highly respected 18 hole course. Harmon and Kevin Norby were familiar with the EcoBunker construction method, and decided to use the Permaedge Bunker Wall option on all of the bunkers. This enabled the club to deliver natural looking Scottish style bunkers, which were perfectly designed to resist the erosion potential of local weather extremes. This was a fortunate decision. Only a month after completion, Hurricane Irma hit Florida, but due to the combination of a robust engineered design, plus the

construction skills of Duinick and EcoBunker's site representative, Llewellyn Matthews, the bunkers suffered no damage. The EcoBunker-Permaedge construction method is the only synthetic bunker wall system that is capable of withstanding such extreme events.

One year on, as these photographs and many posts on social media prove, the short course is extremely popular and providing a visual and strategic delight for those lucky Floridian golfers.



Top Quality Service for Landscapes Unlimited

EcoBunker Ltd has just completed the construction of 70 large revetted (stacked sod) bunkers on Dumbarrie Links, a major investment for US golf course builder and operator, Landscapes Unlimited. The project only gained planning consent in April 2018, however, thanks to a sterling effort from all the contractors on site, the course is on target for opening in 2019.



The Old Course, St Andrews was our quality benchmark at Dumbarrie

Landscapes Unlimited had first encountered the EcoBunker system on the Vestavia renovation project which was designed by Lester George and David Johnson. Impressed by the product, and satisfied in the capability of EcoBunker Ltd as a specialist sub contractor to deliver in a condensed 16 week build programme, EcoBunker Ltd commenced work in June 2018.

The 70th bunker was completed on the final day, October 15th, on time, within budget and fully satisfying the high quality standards expected by Project Manager, Ed Hannan, and Dumbarrie Course Manager Grahame Taylor. Grahame knows a few things about pot bunkers and the pressure of maintaining a top-class golf course. Before taking on the role at Dumbarrie he was the Course Manager of the Old Course at St Andrews!

