



# SPECIFIER  
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## Retaining blocks support Kayamandi upgrading

Last year, Cape Retaining Systems, a retaining block manufacturer and Terraforce licensee-holder, was approached by Regrad Construction to assist in establishing a greater habitable surface area for building low cost houses near the informal settlement of Kayamandi, outside Stellenbosch.

After various options had been considered, Terraforce retaining blocks were decided on as they would provide a cost-effective and durable method for creating platforms and roads/sidewalk support on the old farmland that was to be reclaimed for the housing development.

Henk van Renssen, project engineer with Arcus Gibb, the consulting engineering company involved in the project, says, "The site, called TRA2 (Temporary Relocation Area 2), forms part of the bigger Watergang Housing Project and will soon be home to 380 families who need to be relocated so that the upgrading can take place. The homes, for now consisting of basic wooden structures, will give way to 100 permanent houses. The goal is to provide more formal housing in the long run, while improving the general environs."

The retaining blocks used at the Kayamandi site were pioneered by Terraforce – the Cape



*A Terraforce wall under construction, creating a level platform for roads and emergency housing in Kayamandi, near Stellenbosch.*

Town based precast concrete licensor, Jeremy Leighton of Cape Retaining Systems says, "What makes this product so popular in the industry is that the blocks require low hardware input for manufacture, low transport costs and low inventory requirements at sales outlets. They are hollow, yet strong enough, and require less concrete to do the job when compared to solid block systems, which of course saves money."

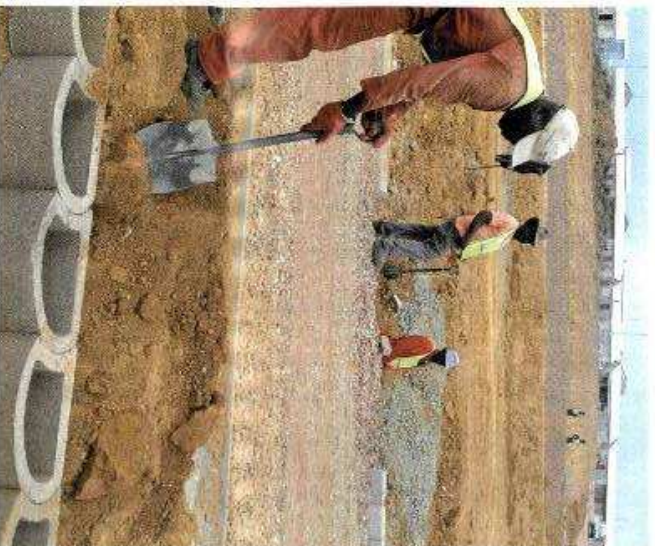
"Concrete retaining walls constructed using the Terraforce system can be easily formed into complex curves or walls in which the upper and lower profiles change," he adds.

"The system also offers a choice between round face (plant supportive) or flush face (smooth or split version) blocks, to suit specific requirements."

Above all, they present a closed vertical surface structure that provides a maximum amount of soil mass within the wall, which prevents backfill spillage, while at the same time offering uninhibited permeability."

The first concrete foundations for the retaining walls at TRA2 were laid in November 2009. Each of the three walls is fitted with a 110mm subsoil drainage pipe that runs the full length of the wall and exits through weep holes cut into individual blocks at regular intervals. As the walls were built up, a sand drainage layer of 500mm was filled to the top to prevent possible damming up of water.

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*A view from the lowest retaining wall towards Kayamandi, with the second completed wall in the background.*