

Enviro-walls: The preferred solution

Issued by [Technicrete](#)

29 Jan 2024

When an effective stormwater attenuation solution was sought for a retirement village, the engineer specified Technicrete's Enviro-wall Retaining Wall System as the preferred product.



The Eldoraigne Village Retirement Centre in Zwartkops, situated upon a sloping hillside, has large quantities of installed paving that hinders the natural infiltration of stormwater. To avoid exceeding capacity of, and preventing the municipal drainage system from overflowing, the engineer designed an attenuation pond at the lowest point on the site, with Technicrete's Enviro-wall System constructed as the supporting walls. The attenuation pond will capture the peak rain and runoff flow during a storm event and allow for a slow and steady discharge into the municipal system that is within municipal requirements, ensuring that installed infrastructure does not flood and thereby avoiding flooding of this area and its surrounds.

Project manager for Kazan Construction, Wimpie Heenop said: "This was the first time we have been tasked with the construction of an attenuation pond water retention system. Technicrete advisors supplied us with the technical support we required to install the Enviro-wall blocks throughout the development of this project. We honestly could not have completed it to the high standard that we have done, without that support. The site engineer is extremely satisfied with the finished product."

"Technicrete took cognisance of our delivery requirements and never defaulted which assisted in keeping the project on schedule. The care of the Technicrete team in the manufacture and transportation of the Enviro-wall blocks ensured that very few broken blocks arrived on site eliminating the need to wait on more stock to arrive. We would happily work with Technicrete on any future projects," Hennops concluded.

"Ten thousand 275mm x 300mm blocks were used on this project which was completed in February 2023," said Arno Smuts, sales consultant at Technicrete. "It's easy to install, cost-effective and offers a variety of visual effects that are

achievable due to its reversible block versatility. Kazan Construction had not been exposed to our Enviro-wall system before, and they were suitably impressed by its design, quality and application simplicity” said Smuts.

Constructed from dry stacked interlocking, precast blocks, the simplicity of the Enviro-wall design enables the blocks to be easily and quickly laid to form an effective retaining wall system. Opening or closing the spacing between the blocks means that the Enviro-wall structure configuration can be altered so that the open arrangement cavities between adjacent blocks can be filled with soil, enabling the moisture in these spaces to promote rapid plant growth. It can also be installed as a solid engineering structure.

A wide range of retaining wall/embankment heights can be accommodated by the system. The geofabric layers can be effectively locked between the Enviro-wall blocks for additional stability, creating a reinforced wall design. The angle of inclination of the wall may be set by using the base block at 70°. Technicrete’s engineering team can assist in the event that other sites require differing angles.

The wall accommodates both concave or convex alignments, down to a relatively small (2m) radius of curvature. Enviro-wall structures accommodate moderate ground settlement while foundation requirements will vary according to wall height and underlying soil conditions.

“Technicrete has a reputation not only for its expertise in the design and manufacture of precast concrete products for the infrastructure sector, but also for the expertise its engineering team brings to site to assist in the provision of the right solution for any challenge our customers may be facing. This is something that we at Technicrete are exceptionally proud of,” concluded Smuts.

Enviro-wall is suitable for earth embankments, bridge abutments, cut slopes, landscaping of cut and fill areas around buildings, a protection for steep channels and river banks as well as culvert inlets and outlets.

Technicrete and Rocla are part of the Infrastructure Specialist Group of companies (ISG).

▀ **Technicrete kerbs and pavers chosen for Benoni Service Stands** 18 Mar 2024

▀ **When aesthetics meet quality** 6 Feb 2024

▀ **Enviro-walls: The preferred solution** 29 Jan 2024



Technicrete

Manufacturing concrete products in the mining and construction industries in South Africa.

[Profile](#) | [News](#) | [Contact](#) | [RSS Feed](#)

For more, visit: <https://www.bizcommunity.com>