

Cinderblock construction for cold store

THE Emantini Seed Bank in Swaziland has showcased simple construction methods and innovative use of materials so as to sculpt the user's experience in an unexpected and inspiring way. It is hoped that this landmark project by the Paragon Group will encourage its replication as a template for similar Seed Banks elsewhere.

The Emantini Seed Bank is a hi-tech form of conservation to safeguard genetic diversity whereby scientists collect and document seeds, and then store them in a refrigerated facility, effectively creating a 'library' of plant genetics. The project consists of two well-insulated refrigerated storage facilities, a laboratory, amenities, and a courtyard space designed to host functions.

The project brief specified a tight budget. "Our success is testament to how we, as a practice, can add value to any project by making the most of any budget. It also demonstrates our mastery in design, and a capability to work in any market sector," Paragon Group Architect Dewald Veldsman explains. Mouaz Sabha assisted with the construction packages, while Kim Newell carried out the initial 3D visualisations.

Due to the budgetary constraints, the most cost-effective construction method was to use cinderblocks. "The humble cinderblock is no stranger to a rural context. By demonstrating that one can use unfinished, cost-effective concrete blocks to create a beautiful piece of architecture, you hopefully inspire and encourage others in the community to do the same," Veldsman highlights.

These cinderblocks were manufactured locally, which means minimal transportation costs. Some of the blocks were altered by placing them on their sides on a shutter board, and pouring concrete in to form a base. These altered blocks were then used for the 'holes' in the wall, as well as for planters and lights. The faces of the blocks were topped off with a matt sealer.

The Emantini Seed Bank is located on a private estate, and forms part of a private nature reserve, nursery, and botanical garden. The main contractor was AMS Construction, under the leadership of Director Carlos dos Santos, who collaborated with the Paragon Group on the Malkerns Square Estate and Matsapha Link Shopping Centre, both in Swaziland. These projects also focused on conventional construction methodologies, materials, and non-specialised skills.