

▶ Case Study: Ramtsilo Manufacturing and Construction



Type of Organisation

Private Company



Founder

Kekeletso Tsiloane and Kedibone Tsiloane



Employees/Beneficiaries

4 permanent staff and more than 100 temporary and informal beneficiaries (waste pickers, brick manufacturers)



Aim of the organisation

To provide innovative building materials (bricks) as a sustainable solution to the global plastic pandemic. To clean up the environment and prevent plastics from ending up in landfill. To provide a means of income for waste pickers and informal workers.



Location

Benoni, Ekurhuleni (Office); Sasolburg, Free State (Manufacture)



Website/contact details

www.ramtsilo.com; info@ramtsilo.com

▶ Building with waste: A sustainable solution for the construction industry

Kekeletso Tsiloane and her sister, Kedibone, grew up helping their father in the family's construction business. While Kedibone was naturally drawn to the internal processes of running a business, Kekeletso preferred to spend time with her father "on the ground", learning about construction materials and processes. The sisters decided to branch out and started their own company, Ramtsilo, in 2013.

▶▶ "We initially did a number of construction projects and realized that we were spending a lot of money on materials, particularly bricks. We tried to find a female or even male black-owned manufacturing plant but struggled to find one. That's when we decided to start making our cement bricks from our mother's back yard in Sasolburg", says Kekeletso.

About the bricks

Ramtsilo's plastic bricks represent a breakthrough in plastic recycling technology.

In addition to preventing plastics and other waste material (such as ash and recycled sands) from ending up in landfill or dumpsites, the recycled plastic bricks are durable, fire retardant and affordable. Because they are not as porous as cement bricks they result in less cracking and can increase the lifespan of a building.

- Bricks comprise 30% plastic to ensure fire resistance
- Bricks are suitable for general building and can be plastered for aesthetic purposes.



The sisters had always had an interest in “doing something with waste” to conserve the environment, but it was only after a conversation with a waste picker who supported her grandchildren by collecting plastic, that they decided to focus on incorporating recyclables into their building materials. “We decided we wanted to find a solution to waste while helping people in our community at the same time.” Basing their business model on social inclusion by creating a reliable and sustainable market for waste pickers, and focusing on using plastics in their bricks, Ramtsilo brought the company into alignment with the United Nations’ definition of a green economy, which is defined as, “low carbon, resource efficient and socially inclusive ...”.

Their entire family came together to test various aggregates from their mother’s back yard and create a prototype for their innovative plastic bricks, which are now used by private contractors and builders.

The company is in negotiation with a large hardware chain and the sisters hope to make their bricks available on a large scale across South Africa soon.

Additional reading

[Green Building Africa](#)

[Green Building Council South Africa](#)

[Business Savvy Sisters Self-funded the First Company to Bring Plastic Bricks to SA](#)

[Sasolburg Sisters the First to Bring Plastic Brick to SA](#)



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