

Alternative building methods continue to change the face of construction in Africa



By [Jolene Blundell](#)

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Beyond brick and mortar, South Africans are increasingly considering new and alternative building methods and techniques. This is largely due to the increase in urbanisation, population growth, ever-increasing utility costs and growing awareness and concern of the effect that global warming will have on the country over the next few years.



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Research has indicated that the construction sector is accountable for 56% of energy consumption, 25-50% of solid waste generation and a yearly 3.9 tonnes of CO₂ greenhouse gas emissions per capita in Sub-Saharan Africa.

In order to combat this, industry leaders are looking at different ways to minimise this effect.

Restoration, rejuvenation and regeneration

This is a new take on reduce, reuse and recycle with specific focus on waste management. It is an exciting trend that is rapidly developing and is being influenced by changes in legislation. Many stakeholders in the construction value chain are experiencing increased costs associated with sending construction waste to landfills, due to the limited space available for dumping.

The result of this is that businesses are looking for solutions to decrease the waste they generate during production, construction and demolition. Industry stakeholders and government have seen the enormous economic potential that waste management holds for South Africans, specifically in the potential reduction of raw material costs as well as job creation and this will continue to be a focus for many years to come.

Smart Building

Future buildings need to be “fit for purpose”, meaning that they need to consider all broad and specific objectives, needs and uses of the building as well as its occupants. This is not only true for the actual building but extends to building

materials and construction methods. Thanks to ever-increasing awareness of carbon footprints and long-term sustainability, more and more companies are opting for alternative construction methods. This is where we expect to see an increase in the use of modern building methods, such as the use of drywall. Due to its light weight and ease of installation, drywall present several environmental benefits compared to brick or block wall systems.

Smart building is not only being impacted by new building techniques, but is also seeing an increase and incorporation of technology in the form of different apps and programmes. These are being used pre-, during and post-construction to assist with myriad functions - from helping clients visualise what the project will look like before it takes shape physically through virtual reality, to helping architects and specifiers measure and monitor the different elements allowing for a seamless, cost effective and energy efficient building process.

Modular and economical design and construction

Modular and economical design and construction talks to offsite manufacturing. There is a growing need to move away from building on-site. Elements built off-site allow for faster and more cost-effective building construction. This also opens the market to new opportunities as customers in remote locations can receive them packaged and ready for self-installation. We expect to see a greater shift towards this kind of construction and building technique in the near future. Not only does this impact the way in which construction will be done but it also unlocks the opportunity for an increase in the demand for skilled artisans within this sector, leading directly to job creation.

ABOUT JOLENE BLUNDELL

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