

# How the construction sector's moving towards greener building techniques

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12 Oct 2018

Green building and sustainability are words that remain at the forefront of conversations for many South Africans and is a trend that has seen continuous growth within the building and construction industry.



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Recent attention around green building has been spurred on by public awareness around environmental issues. Global warming and recent local climatic events, such as the Cape drought have highlighted the need to limit energy consumption and the waste of natural resources. According to research done on low-carbon development in sub-Saharan Africa, the construction sector is accountable for 56% of energy consumption and a yearly 3.9 tonnes of [CO<sub>2</sub> greenhouse gas emissions per capita](#) and as such, it is incumbent upon this category to play a key role in transitioning into a more sustainable society. Added pressure to increase environmental awareness, continuously rising electricity prices and the introduction of energy efficiency regulations has further driven the development of more energy-efficient buildings in South Africa.

## Move towards greater transparency

The industry has already seen a number of trends developing in relation to the growing need for greener building techniques. This is evident in the need for companies to be more transparent in terms of the impact that their products have on the environment and people. Customers want to make more informed decisions when it comes to building and construction and to enable this, Saint-Gobain Gyproc assists clients by providing environmental performance data in the form of externally validated environmental product declarations and life cycle assessments.

Another key trend is the increasing adoption of drywall building technology's. Due to its light weight and ease of installation, drywall presents several environmental benefits compared to brick or block wall systems. A third-party lifecycle assessment comparison between plasterboard systems and traditional materials in South Africa has revealed that using drywall systems instead of brick systems on 1m<sup>2</sup> of partition walls has significant savings potentials: up to 70% in global warming potential, 62% in primary energy use, 86% in wall system weight and 67% in fresh water usage.

## More than just energy consumption

But it's also important to realise that green relates more to just the energy consumption in the traditional sense. On the construction site, the lightweight properties of our solutions (10 times lighter in the case of plasterboard partitions vs. traditional brick) helps to reduce transportation, crane activity and even the depth and material involved in the foundation design. Waste to landfill is reduced by bespoke board sizes to minimise cut-offs and during the design stage, specification teams work with architects and consultants on the building design to minimise waste.

Green building is making strides within the building and construction industry, but there is still significant potential to reduce the gap as we move towards a society that fully embraces green development. With a combination of buy-in from big companies, an increase in the use of sustainable interior construction products, more transparency on the environmental impact of products and a drive to reduce construction waste and carbon footprints, things are moving in the right direction.

## ABOUT THE AUTHOR

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