

Green building practices can mitigate lockdown fallout

The ripples of the national lockdown are still being felt by the South Africa's construction industry. Unexpected delays and disruptions have resulted in increasing construction costs, which have had a knock-on effect for both developers and endusers. World Green Building Week, which runs from 21 to 25 September, encourages construction industry professionals to consider adopting a green approach, in order to keep expenses down and build a better, more sustainable future.



Sean Kenealy, director, Stag African

"To make construction more affordable, developers need to look at every line item involved in their construction and ask how they can reduce capital and operating costs. By implementing green building practices, developers can reduce building time by 40%, which has the effect of dramatically reducing other associated costs, in some cases by up to 13%," says Sean Kenealy, director, Stag African.

"The first – and easiest – step to achieve both affordability and sustainability, is through energy-efficient design. Solar panels, grey water systems and energy saving LED bulbs can help to reduce operational costs and impact, but these are most effective when paired with construction that is innately green - from using recycled materials, to optimal building orientation and natural ventilation," says Kenealy.

Using innovative building technology (IBT) in their student accommodation projects reduces heating and cooling costs by almost 70%. IBT is a green alternative to bricks and mortar buildings that uses lightweight steel structures, prefabricated off-site. This cuts construction waste from 25% to less than 0.1% of building bulk. The steel framing itself is 83% recycled, and the overall result is a carbon-neutral building process that costs less than a traditional bricks and mortar one.

Benefits

The benefits of green building extend beyond economics and the environment, according to the World Green Building Council. The improved internal environment quality from increased ventilation, temperature and lighting control, the use of natural light, and the absence of toxic materials result in the improved health, comfort and wellbeing of building occupants. In a post-Covid world, these factors cannot be overlooked.

