

Building a more sustainable future

CHARMEL BOWMAN

IMAGINE a house's outer structure being erected in just a few weeks - with the building completed in four months, using recyclable material that is environmentally friendly.

Sounds almost impossible and highly unlikely. But alternative, ecological building methods are becoming more mainstream in South Africa as locals try to preserve the environment while still building their dream home.

Bjorn Kahler, managing director of Shospec shopping specialist, has spent the past four years researching light steel framing systems. And while this method of building has been in South

homes being built in a much shorter time. These homes are more energy-efficient."

He said these methods were being used in KwaZulu-Natal, especially where there were low skills levels.

"The building will always be straight when building with prefab, because the parts fit perfectly into each other, whereas building with bricks can go awry.

"Alternative methods have always been around on a small scale, but the trend is moving towards it becoming mainstream," he said.

But Kahler believes that quality of finish is much better with steel structures.

"With light steel framing, a lot of the manufacturing takes place in factories and the components are assembled on site using framed steel sections.

This offers environmentally friendly structural sound buildings with speed in construction and excellent thermal insulation."

He said such a building could be constructed within a

Africa for five years, there is now a renewed interest.

"It is a mindset change because South Africans prefer building with bricks. I live in a steel-structured home and have no regrets," he said.

Other alternatives, such as timber frames, which are lightweight, durable and environmentally friendly, or polystyrene frames filled with concrete and plastered on the outside, are also gaining momentum.

Brandon Abdinor, executive director of Master Builders Association KZN, said more homes were being built using alternative, ecologically friendly methods.

"There are more prefabricated systems and steel structure



Left: The light steel structure of this home in Pietermaritzburg was erected in just a few weeks. Above: The completed house, which has saved the owner in energy costs because of the thermal design.

rain harvesting system."

Kevin Payne installs energy saving devices and says there is renewed interest in "going green".

"People are realising we cannot sustain the way we are living by depleting the Earth's resources. Solar heating could reduce electricity bills by 40

percent. Most solar geysers have a 10-year warranty," Payne said.

Payne said popular choices for homes were solar water heaters, or heat pumps to heat water, energy efficient lighting and natural lighting solutions and gas cookers instead of electric stoves.

Architect Richard Stretton

said conserving energy in homes was an emerging trend. "People from privileged backgrounds have the luxury of being concerned with making their homes green. But there have been initiatives from the eThekweni municipality targeting low- and middle-income homes by using alternative heating sources, and by paying less for your solar water heater, you can save on electricity bills."

He said because of new legislation, homes now being built had to have energy saving devices planned in the drawing phase.

Maured Braune, from the Green Building Council of South Africa, said: "Power failures and load shedding have spurred people to look at possible solutions to their energy problems. It has opened the door for green building initiatives."

To learn more, visit www.gbcsa.org.za or www.masterbuilders.co.za or www.iftb.co.za

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