

GREENER DESIGNS more affordable

Jabulani Eco Projects presents a solution to South Africa's housing problems on current building cost structures, and aims to make the gap between the rich and the poor smaller.



The bottom line to this breakthrough was an 'out of the box' design that can be built at approximately half the price of a conventional structure of the same size.

The first glimpse of hope to achieve this goal was when suppliers like Safintra, who are world-class roofing and steel suppliers, started playing a prominent role to help make the cost-effective design for building a reality.

One way of cutting the costs was by building the houses quicker. The erection process is initiated with a light steel frame (0.89mm) that is joined and erected on the slab. For the external panels, a water resistant zincalume profile (0.47mm) is attached as an outer skin to the frame work.

The internal part of the framework is then clad with a 9mm MGO board (Magnesium Oxide), after which the frame is infilled with an insulating aggregate called Perlite.

The internal panels are clad on both sides of the frame with the

are specifically moulded to avoid an iron effect to the overall finishing of the house. The product is certified by Agrément South Africa.

The roof panels have the appearance of ordinary tiles, which is quite convincing and is comprised of large 825mm panels. Top Paints provided a water repellent, latex based paint which adheres perfectly to the zincalume.

Considering the components of these walls, it comes as no surprise that it is a prime factor in the promotion of the overall thermal qualities of the house. The interior 8 °C warmer in winter and 8 °C cooler in summer, if compared with outside temperatures.

These thermal conditions are also enhanced by insulated ceilings. As a welcome by-product, the quality of these materials not only withstood a highly competent fire test but also contributed to the overall acoustical values of all the rooms in the house.

In an attempt to become greener, the house is fitted with a gas stove, gas geyser and solar lighting. Even the effluents are treated with a Bio-Mite system which is installed in the absence of a municipal sewage system.



MGO boards, and infilled with Perlite. This results in a thickness of 125mm for the external walls and 107mm for the internal walls. These walls display great strength which is at least equal to a standard brick wall and more.

Safintra made the designer's job easier by securing zincalume profiles for roof covering and wall cladding. These products

Safintra Roofing & Steel
 Tel: 086 172 3542
 Email: info@safintra.co.za
 Website: www.safintra.co.za •
 www.autospec.com