

2012

The tale of a Karoo house

Nostalgia wrapped in a modern mantle provides the backdrop for the ecofriendly, wheelchair-ready Nieuwehuyz.

By Beatrice Moore-Nöthnagel • Styling: Misi Overturf • Photographs: Francois Oberholster



hould you find yourself driving through the peaceful town of Prince Albert and stopping in front of this seemingly typical Karoo-style home in Nieuwe Street, you'd be forgiven for thinking that it's just another one of those charming old flat roof homes for which the area is renowned. Upon closer inspection, you'd find clues contradicting your assumption: the 2012 dateline above the façade and, of course, the name Nieuwehuyz reveal that this house is anything but old!

The locals watched in awe and anticipation as the house was being built last year. Environmental engineer Dr Brian Rademeyer, originally from Pretoria and working in Lesotho, knew just what he wanted: the house had to be ecofriendly and in line with the local aesthetic; it had to be constructed by local builders and, as far as possible, with local materials. It also had to be user-friendly and accessible to the wheelchair-bound and visually-impaired.

'Thanks to the town's heritage committee which boasts various highly skilled people who have retired here, I had plenty of insight into what constitutes a typical Karoo home,' says Brian. 'The assistance from local tradesmen was unbelievable and, at the same time, we were able to share our expertise and transfer skills such as those required for the modern self-levelling epoxy floor sealant and the solar power system.'

The Karoo's hot, dry climate was taken into account in every aspect of the design process – from building to decorating – to render the house as energy-efficient and user-friendly as possible. It also helped that Brian's builder, Nante de Villiers, is wheelchair-bound and assisted with fine-tuning aspects such as ablution facilities and counter heights.





Dulux Clouded Slate

Dulux 00NN 83/00

Dulux 00NN 72/00

Dulux 00NN 53/00

Clouded Slate

Clouded Slate
3

'Inspired by the surroundings, I found neutral colours with a calming effect for Nieuwehuyz.'

designerhome







Of all his collectibles, the most precious to Brian is his great-grandfather's old apothecary in the wooden box which dates from the Anglo-Boer War.



Fine finishes

Bathroom Sanitaryware from Plumblink. George; mosaïc tiles from Douglas Jones Tiles **Floors and kitchen counters** Screeded by a.b.e. Construction Chemicals.

Windows with aluminium frames from Alron Aluminium and National Auto Glass Aluminium; curtains and blinds by Finishing Touches.

Furniture from Chair Crazy, Mr Chairman and Novel Idea Trading and Interiors.

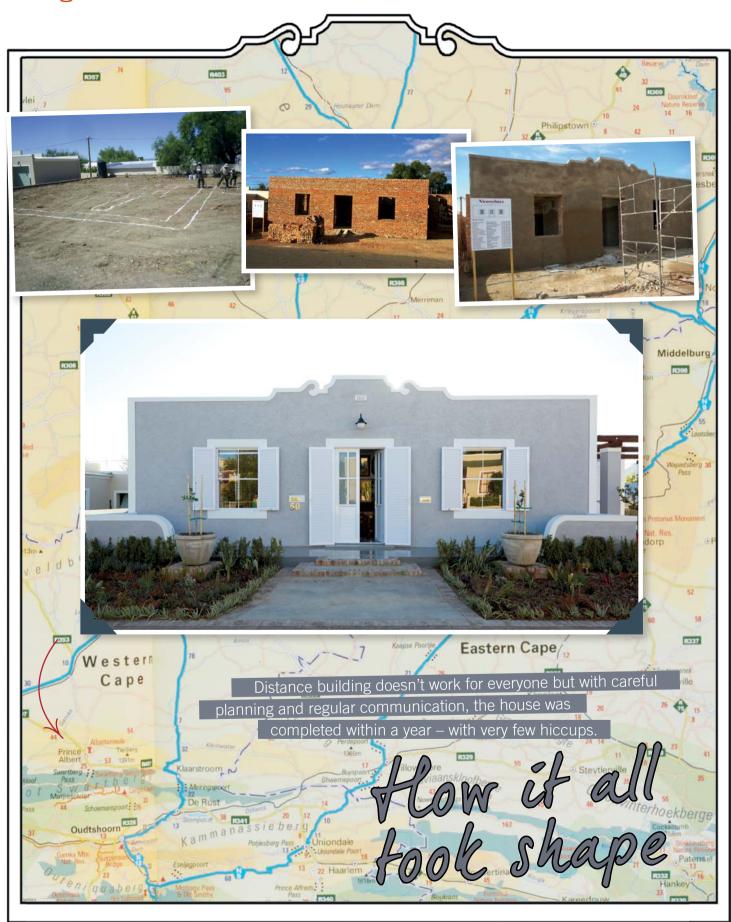
Rugs by Karoo Looms.

Kitchen appliances from SBS Household Appliances, Stove Mecca and Metelerkamp's. **Solar installation** by S&P Power Units.

Crocheted bedspreads by Cura Goodies.



designer home



The timeline



March 2012 The site is filled and the first boundary walls are built. The neighbour was at times somewhat nervous about this wall!



April 2012 The foundations are laid, the wall is at half-height and the built-in bookshelves are clearly visible on the right.



May 2012 The steel roof goes up and the concrete stoep floor in the courtyard is laid.



September 2012 The fountain, with its striking niches, is coming along beautifully.



October 2012 The Duraturf artificial grass from Belgotex Floorcoverings is installed and the metal tree by Lasertech is erected.





October 2012 The kitchen counters are set at just the right height to easily accommodate a wheelchair: 900-1000cm.



The process

Brian visited the site once a month and otherwise regularly emailed instructions through from Lesotho. Every instruction and all feedback was written down and mailed to the concerned party – resulting in probably the most well-documented building ever! 'Planning makes up a third of the entire building process and that's why it's so important to pay close attention to it,' he advises.



Stage of Construction	Builders' Schedule
Foundations and floor slab	23 March 2012
Brickwork and plaster to roof height	26 April 2012
Roof construction complete	18 May 2012
■ Plasterwork complete	22 June 2012
Ceilings, doors, windows and glazing	13 July 2012
 Plumbing and floor screeding 	17 August 2012
Boundary wall, water feature	
and cupboards	21 September 2012
Floor screed and mosaic tiling	5 October 2012
Tiling, painting and electrical	26 October 2012
Practical completion	16 November 2012
Final completion	16 February 2013

What the building schedule looked like...

Of utmost importance...

Insulation

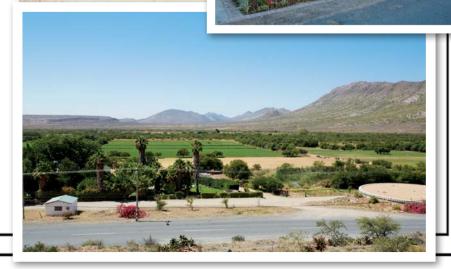
As up to 50% of a house's heat is lost due to insufficient insulation, a cavity wall for the external walls was a logical choice: it comprises two walls with a space in-between that traps air and effectively insulates the building. The clay bricks were brought in from Oudtshoorn, an hour's drive away, helping to reduce the carbon footprint. In the ceiling, three layers of Think Pink Aerolite were installed; this fibreglass insulation is bonded with an inert, thermosetting resin to form resilient, flexible blankets that are easy to install in ceilings or even in the hollows of walls in new buildings. And it makes a huge difference to temperature control!

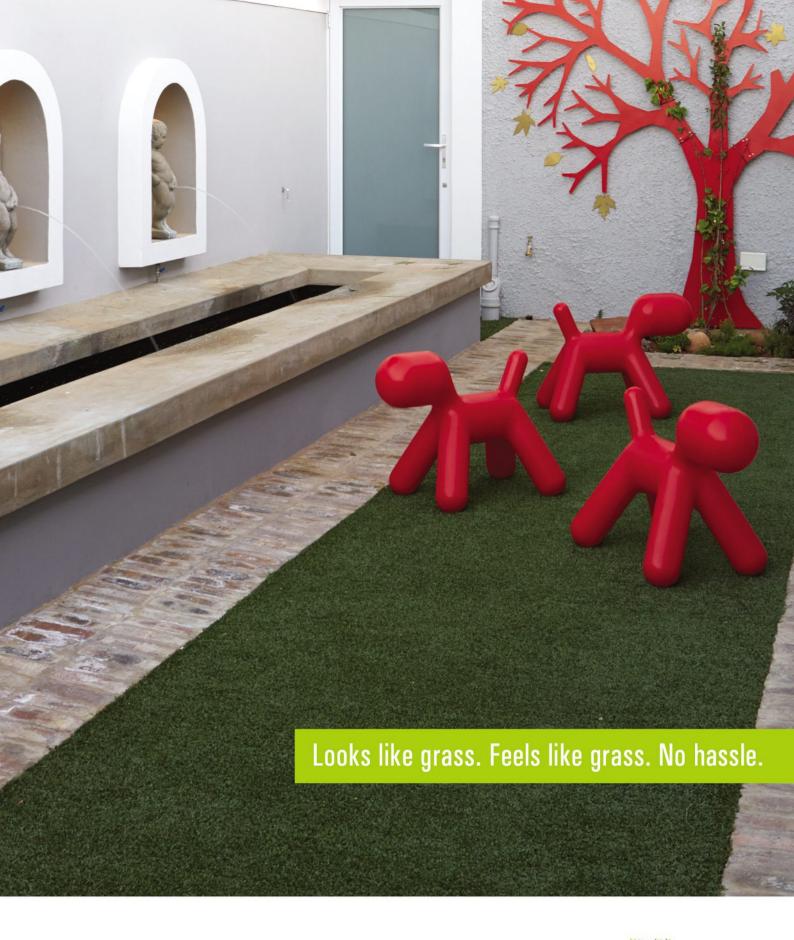
User-friendly features

As Brian intends to hire out the house as a luxury getaway while he works away, he followed the strict requirements of SA's Tourism Grading Council and ensured that the house was user-friendly for both the wheelchair-bound and visually impaired. Features such as the height of light switches, easily accessible kitchen appliances, taps and doors that can be pushed or swung open (for those with arthritis) and sunken tracks on sliding doors that wheelchairs can easily glide over were painstakingly considered. I even moved through the house in a wheelchair to see what works and what doesn't,' recalls Brian.

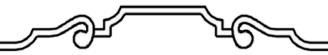


The Swartberg Pass at Prince Albert is one of the country's scenic tourist attractions. Brian and his business partner Dr Judy Maguire offer a specialised tour of heritage sites via their company Koekemakranka Tourism, aptly named after a fragrant, edible bulbous plant endemic to the region.









I'm most proud of the gables at the entrance; they're subtle, unique and striking. – Brian

Energy efficiency

It cost about R150 000 to install a solar power system to power the fridge, TV, fans and anything using less than 3kW. As soon as the load is higher, electrical power kicks in automatically. While the dishwasher, stove and washing machine are electric, Brian has since discovered that his washing machine can also operate on solar power as a toploader gets its hot water straight from the solar geyser, compared to a front loader which heats its own water. The solar power system stores energy for three days, accounting for rainy or cloudy conditions - which you don't often experience in the Karoo. Brian says that apart from a solar power system, there are plenty of ways in which you can save on electricity consumption:

- A solar geyser alone can save you between 25 and 40% in electricity.
- LED lamps and striplights save 80 to 90% more energy than ordinary light bulbs.
- Choose appliances with the highest energy-efficient grading (AA+ and higher), like the stylish black fridge, dishwasher and stove in this kitchen.

What makes for a Karoo-style home?

Because of the region's dry climate, pitched roofs aren't necessary and most homes have a flat roof with a slight incline at the back. Initially, 'brakdakke' made waterproof with clay were used but durable, waterproof zinc sheets which became popular in the 1860s soon took over. Later, many houses included a verandah – a structure loaned from the colonial British-Indian style that offered protection from the harsh sun. Even today, towns such as Hanover, Aberdeen and Colesberg still boast plenty of Karoo-style homes associated with traditional rural Afrikaner culture.



Window dressing

Double glazing would have proven too heavy for the sash windows so typical of Karoo homes, so durable single-glazed aluminium frames and aluminium shutters were chosen. 'Anyone can control the climate within a house by dressing the windows in the right medium and by opening and closing them as the sun moves,' says Brian. Thanks to the cavity walls, the windowsills are quite deep and four different coverings are used on most of the windows:

• Roller blinds block out the sun as a first defence • Linen curtains soften the light – and satisfy Brian's mum when she comes to visit! • Adjustable Venetian blinds let in the required amount of light • Curtains with blockout lining provide relief.

Exterior shutters can also be closed against the sun. At night, everyone sleeps under mosquito nets with the windows wide open to encourage ventilation. Boasting a solar geyser and solar power, the house is highly energy-efficient with an electricity account of less than R200 per month! In time, the white bougainvillea will grow over the tanks that store water for the fountain and little garden.



Waterwise considerations

With an annual rainfall as low as 200mm, storing and saving rainwater is a must, so Brian has installed three 1000-litre tanks to retain water for the hardy succulents in the indigenous garden at the front of the house.

The water feature in the inner courtyard provides an attractive focal point and cools the air, thanks to a high level of evaporation; and the durable artificial Duraturf grass from Belgotex Floorcoverings requires no watering!

CONTACTS & STOCKISTS a.b.e. Construction Chemicals 0860 223 773 • Alron Aluminium 044 695 1777 • Architect Jan van der Westhuizen 071 900 0699 • Belgotex Floorcoverings 033 897 7500 • Chair Crazy 011 483 2225 • Cura Goodies 083 449 9244 • De Villiers Builders 083 484 1517 • Douglas Jones Tiles 086 166 7242 • Finishing Touches at Builders Warehouse 012 664 4825 • Karoo Looms 023 541 1363 • Koekemakranka Tours 023 541 1713 • Lasertech 041 487 3303 • Metelerkamp's 044 382 0274 • Mr Chairman 083 288 1704 National Auto Glass Aluminium 083 560 9961 • Nieuwehuyz nieuwehuyz@gmail.com • Novel Idea Trading and Interiors 083 538 6397 • Plumblink George 044 871 1730 • S&P Power Units 078 237 6113 • S.B.S. Household Appliances 011 656 0025 • Stove Mecca 0861 10 11 52



Windows

flu screens

· Security gates

Shower doors

cekorcut

www.dekorcut.co.za meredith@dekorcut.co.za 079 6764492 Nieuwehuyz by Jan van der Westhuizen

Bartsch

Bartsch Architects cc.

Reg. Number 2000/072150/23 50 Balfour Road Vincent East London PO Box 19704 Tecoma 5214 South Africa

Tel +27 43 727 0765 Fax +27 43 727 0766 e-Mail admin@bartschec.co.za

Services:

Healthcare
Education
Government
Institutional
Housing & residential
Sports & recreation
Commercial & retail

We service and refurbish Aga and Esse stoves. We supply all the parts for stoves and heaters direct from the factory. We also supply heat resistant glass for heaters. We have being heating Africa since the eighties.... Tel: +27 11 818 2173/4 Cell 082 444 46 7674 email:lab1@iafrica.com www.stovemecca.co.za

Vir 'n gratis kwotasie of poodinstallering, skakel ons by 083 560 9961

Professional calculation, design, supply and installation of alternative power systems with solar, wind or hybrid. Suppliers of the complete off-grid solar solution to the Nieuwehuyz project. 1121 Steve Biko Road, Wonderboom South, Pretoria Tel: (012) 3355734 Fax: (012) 3356438 E-mail: sppower@mweb.co.za Website: www.sppowerunits.co.za

To advertise here contact

Zandile Mazwayi

011 217 3049

