

Understanding eco-architecture

It's one of the top trends for 2014 – and one that will get only more popular in years to come. But what exactly is eco-architecture?

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'GREEN ARCHITECTURE ...

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It goes by various names: sustainable architecture, green architecture, eco-architecture But the core is always the same: this is architecture with a vision towards the future. The goal? To reduce the negative environmental impact of buildings by utilising materials, energy and space in the best possible way.

Eco-architect Andy Horn (ecodesignarchitects.co.za) wrote the Manifesto for Green Architecture, along with a definition of eco-friendly architecture: 'Green architecture is not a style, trend or vernacular. Neither is it new. It is a climatically, geographically and culturally appropriate way of building. It combines the best of both old and new technology. Green architecture treads lightly on this planet and respects and cares for the Earth in a sustainable manner'.

Carefully chosen materials

Mark Thomas (markthomasarchitects.co.za) is another of South Africa's emerging names in eco-architecture. He runs his practice in a collaborative environment with other architects, and specialises not only in buildings, but also in sculptural works. As with many eco-architects, Mark's passion for specific materials shines through in his use of timber, thick carved walls, raw brick, concrete, stone and natural materials. His goal is to strive for simplicity in his architectural work, and to frame nature with built objects uniquely created

for our local, unique South African environment.

Social component

A core component of socially relevant eco-architecture is human involvement, which is achieved mainly by empowerment through skilling. Etienne Bruwer from Greenhaus Architects (greenhaus@icon.co.za) specialises in organic design and sustainable procurement in the built environment in Southern Africa, with an emphasis on social beneficiation through skills training in the NGO and government-building sector. Greenhaus is currently engaged in building a new town near Kommetjie, in which residents are being trained and skilled to build their own homes using 'waste materials' (stone and gravel from the site, generated by the infrastructural siteworks and road building). The project has been shortlisted as a finalist for World Design Capital 2014.

Understanding eco-architecture and sustainability is a key step towards recognising that the way we build contributes to societal wealth and personal wellbeing, and, in the longer term, that investment in living, manmade environments is future-proofing the sustained health of the environment and of vital, thriving communities.

Find out more about about the Manifesto for Green Architecture Pg. 7

The Manifesto for Green Architecture

Eco-architect Andy Horn put together the Manifesto for Green Architecture in South Africa. Here's an outline of its core ideas

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The manifesto was presented at South Africa's first conference of Sustainability in the Built Environment and is part of Earthlife Africa's website (earthlife.org.za) – a non-profit organisation founded in South Africa in 1988 that aims for a better life without exploitation of people or the environment.

There are six broad principles for a greener approach to architecture in the manifesto:

- 1 SOCIO-ECONOMICS**
Promoting social, economic and cultural upliftment
- 2 LAND**
Respectful and symbiotic with the local environment and its resources
- 3 WATER**
The protection, conservation, efficiency and re-use of water
- 4 ENERGY**
The conservation, efficiency, and renewable use of energy
- 5 HEALTH**
Non-polluting environments and healthy materials
- 6 HOLISM**
Holistic and intrinsically recyclable, restorative and revitalising

Why is eco-architecture beneficial?

According to Andy Horn, it:

- ▲ Reduces the operating costs of buildings
- ▲ Improves occupancy rates of buildings
- ▲ Improves health and productivity for those living in these buildings
- ▲ Increases property values
- ▲ Guarantees little environmental impact
- ▲ Ensures development is kept sustainable