

Designing for sustainability

Like many other industries, the construction industry has had to re-think its relationship with the environment. Gradually, we are starting to embrace aspects of green construction and accepting our responsibility to the environment. We are exploring better ways of doing things and have had to critically look at our processes as we strive to contribute towards sustainable development.

By definition, sustainable design, also known as green design, is the philosophy of designing to comply with the principles of social, economic, and ecological sustainability. It is widely accepted that the architectural world, by virtue of being responsible for the initial design of a project, has a critical role to play in influencing sustainable design.

The concept of sustainable design considers all aspects of a project, from the time construction starts, right through to the time when the structure is in use. This is to ensure that the building continues to be environmentally friendly throughout its life time. This can be achieved by focusing on certain criteria such as:

- Energy efficiency
- Reduced water use and conservation
- Reduced waste
- Designed for re-use after service life
- Reduced toxic waste emissions
- Reduced use of natural resources and the replacement thereof

In South Africa, the principle of green design is still in its infancy, with a high percentage of current home-build projects not yet taking into account the principles of sustainable construction and the potential impact of these projects on the environment. However, in the corporate and commercial world, there has been a noticeable shift towards green construction. The government has also started enforcing some of the green principles into law and with time, this trend is likely to continue.

As our consumers become more aware, the demand for sustainable design will also grow. It is now abundantly clear that this is the way the world is going. We have the perfect opportunity to pioneer the green movement at design stage and followed by good practices throughout the project execution phases.

It is clear that we cannot afford to miss any opportunity anymore if we have any chance of reversing the effects of global warming. It is exciting to witness the growing awareness around sustainable development and the efforts being made across the world.