

GREENING THE HOME

“GREEN BUILDINGS”

Our homes and other buildings are a major source of greenhouse gas emissions, both in the process of manufacturing their constructional material such as bricks, cement, steel, aluminium and fittings, as well as in their subsequent operation in terms of maintenance, heating, cooling and lighting.

Green buildings constructed with local, energy-efficient and durable materials can be price competitive, retain their value because of reduced maintenance as well as having a reduced environmental impact.

But what if we are not considering building a home and already have a home which may not have been designed to green specifications?

We will need to look at our home holistically and this also means taking into account the outside areas. We need to emulate natural cycles and find ways to encourage reduction, repair, re-use and recycle at every level with regard the wastes we produce, energy, water and air used and all other resources that a home consumes in its lifespan to ensure long-term benefits.

A home orientated northwards, walls and openings collect low-angle, gentle winter sun, while the summer sun passes vertically overhead. Insulated roofs and deep eaves also help to reduce the intensity of the heat entering our homes. Solar or photovoltaic panels placed on roofs will provide electricity to run low consumption appliance such as a TV, radio, lights and fridge. Installing energy efficient light bulbs (CFL's) make a sound environmental choice. The choice of indoor flooring – ceramic, wood, slate, rock or carpeting can heat or cool our homes. Outdoor paving holds and reflects heat and increases water run-off. Indigenous lawns and gardens save a household many litres of precious water. Grey-water or rain water systems are worthwhile installations.

Every effort should be made to avoid hazardous chemical components such as carpet dyes or paints and sealers. Use plant oils for treating wood and water-based paints for interior and exterior use.

Windows can be protected with shutters, awnings and screens. Skylights on the northern slope of the roof allow natural light into the house. On cold days draw curtains in the early evening to retain the warmth of the house. Grow a deciduous creeper over a veranda or yard and plant indigenous trees on the south, east or west of our home to provide shade during summer.

It is time for green architecture to take root in South Africa and there is an urgent need to align development and architecture with the concept of sustainability.

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