

## FACTSHEET #09

### The immediate and long-term costs of sustainability

Although many industry professionals have the perception of a “green premium” of 17%, the actual premium cost of constructing a sustainable building is only around 7% - an expense that is quickly amortized based on the energy savings alone. The pillars of sustainability underlie the principles of the Clay Brick Association and its members.





## THE IMMEDIATE AND LONG-TERM COSTS OF SUSTAINABILITY

The architectural profession safeguards the value of South Africa's built investment – the structures in which we live, work, learn and play. This built environment needs to be sustainable in the sense that it must be capable of being passed on to future generations – to our children and theirs. This goes beyond structural integrity, to the environmental, social and economic implications of how we build and which resources we deplete.

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### SOCIO-ECONOMIC IMPACT

At a socio-economic level, the clay brick industry makes a positive contribution to job creation and employment in the local construction sector. Clay bricks are mainly produced by just over 100 medium-sized companies based in rural and peri-urban communities near silicate deposits.

Clay brick manufacturers provide steady employment as well as on-the-job basic education and training to their staff. Staff children are usually educated in nearby community schools. The skills of bricklaying are respected and are remunerated reasonably well. Once this trade is learned, well-paid employment is likely and entrepreneurial opportunities are possible.



### ENVIRONMENTAL IMPACT

Brick production can be achieved with low levels of carbon emissions during manufacture and distribution. It is however during the long operational stage that brick comes into its own with significantly low CO<sub>2</sub> emissions over its life of 100 years or more. This is a consequence of the inherently low diffusivity properties of clay brick masonry.

Face bricks save an approximate 6.0Kg CO<sub>2</sub> emissions for every square meter of wall, each time they are not repainted. Clay bricks are inert; they contain no volatile organic compounds (VOCs), pollutants or allergens and are resistant to ants, borer and termites. Air humidity is also regulated, creating an ideal climate for human comfort.



## INVESTMENT VALUE

A property owner with a clay brick house can be assured of a valuable long-term investment and low operating costs. Clay Bricks maximise on energy efficiencies by absorbing heat during the day and releasing it at night, thus reducing the need for artificial heating in winter and cooling in summer.

Clay brick is a highly prized building material, and the value of properties built from clay brick increase over the years for decades creating pride, dignity and wealth for owners. The maintenance costs of face brick particularly are minimal.

Clay brick improves the quality of life of South Africans through improved security and dependable protection from the elements. Clay brick walls obtain maximum fire ratings and brick homes are naturally quieter as they have one of the highest acoustic attenuation values of any walling material.

Clay bricks can be trusted to create environmentally responsible living and workspaces for today's generation and beyond.

### **For further information:**

The Clay Brick Association of South Africa

Website: [www.claybrick.org](http://www.claybrick.org)

