

# FACTSHEET #03

# Clay Brick: meeting the needs of future generations

Clay brick acts as a natural "solar panel". It has the ability to absorb heat during the day and release it at night, thus reducing the need for artificial heating in winter and cooling in summer. Clay Brick's ability to "self-regulate" temperatures makes it superior to other walling materials.







# MEETING THE NEEDS OF FUTURE GENERATIONS

Sustainable buildings meet the needs of the present, without compromising the ability of future generations to meet their own needs. Property developers and architects need to consider not only the short term costs of construction, but the long term costs in terms of impact on the environment, energy efficiency, maintenance, operation and the lifespan of the building itself.

In South Africa, it is estimated that the heating and cooling of internal spaces consumes as much as 25% to 40% of the total operational energy. Clay brick has the ability to absorb heat during the day and release it at night, thus reducing the need for artificial heating in winter and cooling in summer. This a critical factor in construction material selection, especially in low-income built environments. Clay Brick's ability to "self-regulate" temperatures makes it superior to alternate lightweight building systems.

Once laid, facebrick withstands fire, rain, hail and intense heat – remaining beautiful indefinitely without maintenance – no initial painting, and no ongoing repainting and replastering.

Clay bricks are entirely natural, contain no pollutants or allergens and are resistant to ants, borer and termites. They are also recyclable or reusable, and can be returned to the earth at their end of their useful life.

Clay bricks are truly sustainable – and are trusted to create environmentally responsible living and workspaces for today's generation and beyond.

# THE BRICK YOU CAN TRUST TO PROTECT YOUR FAMILY

Clay Brick is integral to the sustainable development of communities across our beautiful country, having been used as the building material of choice since our ancestors.

The long life span and durability afforded by clay brick ensures that clay brick homes last for generations, while also instilling a sense of place, worth, comfort and security in the lives of our people.



Clay Brick homes have long been the benchmark for all that is 'good' in a home, thanks to their durability, structural integrity and security.

When one considers the long-term performance, occupancy comfort, colour-fastness and life cycle value to be enjoyed from living in a clay brick house, clay brick stands out as a pillar of value now and in the future.



## **STRENGTH**

Clay Brick has high compressive strength that ensures the structural integrity of clay brick structures built in accordance with prescribed codes of building practice.

#### INVESTMENT VALUE

Clay brick houses have long been used as the benchmark for quality housing in South Africa, having high aspirational value for all South Africans.

## **AESTHETIC VALUE**

Clay Brick's simple rectangular format has an appealing human scale providing for endless applications and interesting design using different bond patterns, combinations of colours, and textures, allowing for endless opportunity to individualise one's home.

#### FIRE RESISTANCE

Clay Brick is incombustible, and therefore cannot contribute to the start or rapid spread of fire. Clay brick walls fire ratings provide the standards in our building's code of practice for other walling materials to aspire.

#### SOUNDPROOF

Clay Brick resists the travel of sound and muffles external noise, providing for quiet indoor spaces.

#### THERMAL COMFORT

Clay Bricks have natural thermal qualities that slow the transfer of heat through the walls of houses, thereby contributing to optimal thermal comfort, keeping buildings cool in summer and warm in winter, resulting in low energy requirements for artificial heating and cooling.

## HEALTHY FOR RESIDENTS AND THE ENVIRONMENT

Clay brick is a product of 'mother earth' – 100% natural. At the end of the life of the building, it can be crushed and returned to the earth, reused or recycled. Being an inert material Clay Brick does not release harmful Volatile Organic Compounds or CFCs that can impact negatively on air quality.

#### LOW MAINTENANCE

Clay face bricks require little or no maintenance ensuring lowest life cycle costs, saving both time and money in the long term.



# SOCIO-ECONOMIC VALUE

Clay Brick's ease of application is to be found in all forms of construction. Clay Brick is widely available and supports employment opportunities, upskilling and small business development opportunities throughout South Africa.

#### **TIMELESS**

Brick in architecture stretches back thousands of years with the many wonderful face brick buildings throughout the world and South Africa standing as testament to clay bricks timeless beauty.

#### For further information:

The Clay Brick Association of South Africa

Website: www.claybrick.org