



Clay brick buildings shape South Africa's architectural heritage. In every province you will find historic brick schools, hospitals, churches, stately homes, municipal buildings and monuments. You will also find durable and affordable brick homes that have protected and served South African families across several generations.

Endurance over centuries

Brick masonry does not rot, tarnish, puncture, fade, rust, scuff, peel, erode or burn. Most clay brick structures last over 100 years, and there are many brick buildings older than 500 years.

The Bell Tower at the Castle of Good Hope in Cape Town – South Africa's oldest building – has braved the Cape of Storms since 1684.

Absolute structural integrity

Clay brick walls have impressively high load-bearing capacity and excellent dimensional stability. These inherent properties limit cracking and ensure structural integrity. This extended operational life reduces brick's carbon footprint, dissipating embodied energy over its long life cycle.

Fired clay bricks come in a range of compressive strengths from 7MPa for Non-Facing Plaster (NFP) bricks, to greater than 50MPa for some Face Brick Extra (FBX) and Engineering products.

Maximum fire ratings

Clay brick is incombustible and cannot contribute to the start or rapid spread of fires. Double-leaf clay brick walls achieve maximum fire ratings.

Clay bricks are fired at temperatures of 1000°C - they easily resist this level of heat without shattering or crumbling. Brick walls do not conduct electricity or lightning.



Built-in Security

Because it is an extremely dense construction material with a high compressive strength, clay brick protects residents against natural disasters like flooding, lightning and hail, as well as civil crime, vandalism and unrest.

Reduced cracking

Daily and seasonal temperature fluctuations can cause walls to crack. The thermal expansion and contraction of clay brick is minimal throughout the year reducing the risk and cost of unsightly or potentially dangerous cracks.

Water-resistant ceramic

Clay bricks are fired in a kiln (not just dried in the sun) so they can withstand saturation from flood water

without being adversely affected. They are impervious to all weather. They absorb and release moisture easily, so walls dry out quickly without ugly colour changes.

SABS-approved quality

Clay bricks are manufactured to SABS specifications and their use in the construction of commercial and residential buildings is controlled by national building regulations.

This protect home owners and property investors.

SANS 227:2007 and SANS 1 575:2007 classifies the South African National Standard for burnt (or fired) clay bricks and paving units.



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Durability in tough environments

Clay brick withstands severe climate zones and industrial areas where high acid or alkaline discharges occur.

At the coast, salt sea mist, high water tables, rapid temperature changes and soluble sulphates in the soil combine to create a highly corrosive environment. Green Point lighthouse, South Africa's first lighthouse, is built from brick.

Structurally adaptable

Brick walls have the structural strength and density to support built-in cupboards, heavy shelves and wall-mounted fixtures.

You can usually remove a non-load bearing wall entirely without compromising the integrity of the building, giving property owners the option to do alterations and extensions. Double-leaf brick walls protect conduit and piping without reducing accessibility.

Suited to the South African climate

Bricks are a fired ceramic building material. Brick masonry withstands storms, fire, rain, hail and intense heat – remaining beautiful and secure for centuries.

Due to its extended lifespan, clay brick is the most economical building material available today and uniquely suited to South Africa's climate and lifestyle.





Clay Bricks are thermal batteries, using energy from the sun to provide natural thermal efficiency, reducing the need for electricity-guzzling air-conditioners, heaters and humidifiers. Due to its durability and strength, clay brick is proven to be the most cost-effective walling material available, offering numerous long-term savings.

Save on painting & plastering

Clay face-bricks require little or no maintenance ensuring lowest life cycle costs. This saves residents and property owners time and money year after year. Low maintenance mitigates carbon debt associated with regular painting and refurbishment.

Save on air-conditioning

Bricks "self-regulate" keeping internal spaces naturally cool all summer - reducing the need for expensive air-conditioning.

Save on heating bills

Clay bricks are thermal batteries, using energy from the sun to boost thermal efficiency in our South African climate. The bricks absorb the warmth of the sun all day, and release the heat inside during cold winter nights.

The high thermal capacity (C) with resistance (R) (or CR value) of clay brick significantly reduces the need for thicker insulation materials between the brick leaves in order to meet building regulation requirements.

Save on cleaning & repairs

Most brickwork stains can be cleaned with a stiff fibre brush and running water, but in special circumstances chemical cleaners are inexpensive and easily available. If clay brick bricks or pavers become stained, or the mortar crumbles, simply drill out or remove the mortar, remove the brick and replace it.



SAVE

Save on maintenance - minimal cracking

Most building materials show stress cracks due to daily thermal expansion and contraction, or due to alternating sunny and rainy days.

Thermal movement of clay brick is minimal both winter and summer. Movement per 10m of wall for a 50o temperature change is only 2-4mm. Clay bricks rarely exhibit movements due to moisture in excess of 1mm per 10m of walling.

Recycle and reuse

Clay bricks and pavers can be salvaged, sold and reused. Crushed bricks are a popular choice for non-toxic aggregate for road construction, landfill and site levelling.

Save on construction and labour costs

Modular clay brick walling is flexible and inexpensive to work with. Construction teams can adapt to changeable site conditions and client demands. It implements complex architectural designs and simplifies logistics, on-site damages and ordering.

Masonry construction does not require large staging areas on site or heavy equipment for relocation. No expensive tools are needed for accurately placing bricks or laying masonry or paving.

There are trained, competitively priced bricklayers throughout South Africa. Visit the CBA website to search for brick suppliers by name, city, province or proximity to your construction site.



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Reduce construction risk

Brick masonry is predictable in terms of performance, project timing and building costs. Bricks have consistent sizes and the industry is regulated by strict SABS quality standards. Bricks have known parameters for use with different foundations, soils and climate zones. Bricks are safe to transport even on rural roads.

Cut construction time with maxis

Non-standard, large bricks (or Maxi's) can lower construction material costs and save time. Maxis use less mortar and have fewer joins per square metre. A single leaf wall of 140mm-wide clay bricks still meets SANS 10400-XA requirements.

SANS204/10400-xa compliant

Construction companies will find it easy to keep within National building regulations. Clay brick when combined with thermal insulation in a double-leaf cavity wall automatically meets the Deemed-to-Satisfy requirements of SANS 204 and SANS 10400-XA: Energy Usage in Buildings.





For the good of families, communities and the environment, it makes sense to choose construction materials that are sustainable, healthy, energy efficient and natural. The insulation properties and density of clay brick significantly reduces energy use and CO2 emissions throughout its long life - and can then be reused or crushed and returned to the earth.

Regulating humidity

With its ability to regulate both air humidity and temperature, brick homes maintain a cool, comfortable interior throughout hot, rainy months - rooms don't become dank and stuffy. As a 100% natural material, clay brick "breathes" - its internal structure is comprised of a fine capillary pore system that enables water vapour to be absorbed and released quickly.

Mould & fungus resistant

Brick masonry is not a food source for moulds or fungi and does not promote mould growth even when wet. Clay bricks do not remain damp. Double-leaf walls reduce the variance between indoor and outdoor temperatures.

Insect, rodent and reptile resistant

Clay bricks are resistant to damage from ants, borer and termites. Thanks to their inherent strength and high density, insects, rodents and snakes cannot live in, chew through or crawl between mortared clay bricks.

Sound & noise protection

The density and mass of clay brick masonry makes it a natural sound barrier with high acoustic protection - ideal for schools and community buildings. Brick homes keep suburbs quiet even with high-density living. The acoustic insulation of clay brick ranges from 43db to 49db.



Inorganic & inert

Made from clay and shale, clay bricks meet all requirements for healthy living. They release no VOCs (Volatile Organic Compounds) to reduce air quality in enclosed spaces. Clay bricks release no toxic fumes or gases under either normal or fire conditions.

Brick buildings are energy -efficient, resource-efficient and sustainable. Clay masonry cannot contribute to conditions like "sick building syndrome".

Stopping condensation

Double-leaf clay brick walls minimise interior damp and condensation in winter rainfall regions like the Western and Southern Cape.

Thin materials like glass and cement panels react quickly to temperature

differences between the cold outside and warmth inside so droplets of water condense on the inner surface. The density and thermal capacity of clay brick ensures that interior walls never become damp.

Accessible pavements for the elderly

Research and prolonged use has proven that segmented clay paving complies with accessibility guidelines for wheelchairs and is user-friendly for the elderly or disabled, or those with poor vision, crutches, walking aids, prams, trolleys or other wheeled equipment.



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Building Sustainable Communities

Economic growth in rural areas

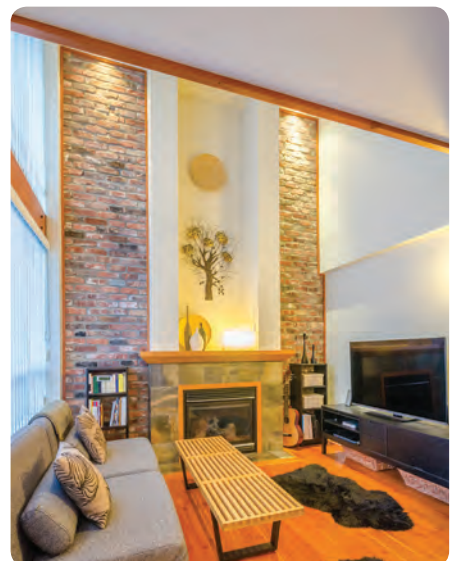
Brick products and manufacturing technologies are not imports - every brick is made here in South Africa, under stringent and well-regulated quality standards. Clay deposits and brick manufacturers are found outside urban centres and provide stimulus for economic transformation, local job creation and skills development.

Continually improving air quality

CBA Members preserve the environment by minimising dust, fossil fuel use and carbon emissions during manufacture and distribution. This ensures that local communities do not experience reduced air quality.

Job creation & skills development

No matter where the construction site is located there will be trained, local bricklayers to complete the project. It is estimated that over 200,000 workers are directly employed across the building industry in production, bricklaying and plastering.





A clay brick's simple rectangular format has an appealing human scale. Its balanced proportions provide for limitless options as you combine different bond patterns, colours and textures. Clay brick allows you the opportunity to individualise your home - creating a modern work of art that grows in value every year.

Beautiful and timeless

Whether it is used as a bold exterior statement, or an organic and elegant interior feature, visitors will want to run their hands over natural brick just to feel its texture.

Clay brick walling provides a welcome contrast to cold, hard construction materials like steel, glass, aluminium and polished tiles.

3D textures

Brick adds atmosphere and a tactile dimension to an otherwise plain wall. Three-dimensional, symmetrical lines of masonry offer a constantly changing display of sculptural light and shadow even when painted.

Brick adds character to your home and creates stunning accent walls that enrich the design.

Colour choice

The varied colour palettes and texture choices of natural brick means walls don't need to be hidden away under plaster and paint. From deep reds and browns to light creams, tans and greys, clay brick masonry creates one-of-a-kind home exteriors that make a statement.

Colour-fast

The enduring hues of clay remain beautiful for life - colours never fade, peel or rust and won't discolour or darken in the rain. Textured bricks are forgiving, disguising marks or imperfections.



STYLE

Authenticity & harmony

Clay brick walls blend well with both traditional and contemporary materials and natural clay masonry homes are an attractive and desirable addition to any neighbourhood.

Brick brings rich colour and texture to modern materials like concrete, steel and glass. Brick masonry also complements rustic materials like timber, stone and thatch while bestowing a sense of heritage and authenticity to any home.

Get creative with special shapes

Clay bricks are so much more than rectangular blocks. Corners, radials, bull-noses, sloped sills, headers and coping caps can be used for dramatic angles and curves, finishing off edges for aesthetics and safety. A custom-

shaped brick ensures visual appeal and a distinctive personality.

Create visual effects with bonding patterns

The bond is the pattern in which bricks are laid. The visual contrast between courses of headers and stretchers combined with differences of colour or tone create subtle horizontal, vertical, cross and diagonal motifs.

A recurring bonding pattern makes a unifying thematic element in walls and paving - both functional and fabulous - while eliminating the time, cost and carbon footprint associated with continually maintaining plaster and paint.



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Desirability & dignity

Many of the world's most famous royal palaces, heritage homes, universities and cathedrals show off luxurious clay brick exteriors.

Investment value

Clay brick has long been used as the benchmark for quality housing, with the highest aspirational value for all South Africans. Clay brick homes are always in demand and define the benchmark for superior long-term investment value.

Proudly South African

When you build with clay brick, you build for the future. You build pride and dignity; you build safe, healthy environments to live and work. The result is satisfied property owners who can rely on an affordable and easily maintained investment.

And most importantly you create jobs in local communities as well as prosperous entrepreneurs who manufacture, sell and build with South African clay brick.

