Intrinsically Sustainable and Energy Efficient
“Clay Brick Ticks all the Boxes”

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On behalf of:
The Clay Brick Association

www.claybrick.org
Intrinsically Sustainable and Energy Efficient
“Clay Brick Ticks all the Boxes”

- **STRUCTURAL INTEGRITY**
  Clay Brick construction has proven integrity 100 years and beyond

- **LONGEVITY**
  Provides opportunity to dissipate all embodied energy over its lifecycle

- **NON COMBUSTABLE AND FIREPROOF**
  Clay Bricks do not normally suffer structural damage during fire and can therefore continue their load bearing function

- **CERAMIC PROPERTIES**
  Can withstand saturation from flood water without being adversely affected structurally

- **HEALTHY ENVIRONMENT**
  Have mineral properties that meet all necessary requirements for healthy living

- **PHYSICAL ATTRIBUTES**
  Have a natural propensity to absorb moisture from the air when the relative humidity is high and returns it when indoor air becomes drier

- **INORGANIC**
  Release no VOC’s to impact on air quality

- **INERT QUALITIES**
  Release no toxic fumes/gases under either normal or fire conditions

- **SOUND INSULATION**
  High mass of Clay Bricks naturally offers high acoustic protection

- **DURABILITY**
  Low maintenance qualities mitigate future carbon debt associated with refurbishment and replacement of less durable walling materials and systems

- **COLOUR-FAST**
  Enduring hues and textures that eliminate carbon debt associated with painting
Clay Brick Facts: Clay Bricks Ticks All Boxes in Sustainability and Energy Efficiency

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- THERMAL MASS
  Uses energy gains from the sun providing the "X" factor to the thermal efficiency equation in South African climates

- THERMAL CAPACITY
  Provides the propensity to "self-regulate" keeping internal space naturally cool in summer and warm in winter

- CR PRODUCT
  High thermal capacity (C) with resistance (R) supports high CR product values proven necessary for achieving optimal energy efficiency and lowest heating and cooling energy usage

- MASS ENHANCED R-VALUE
  Inherent thermal capacity eliminates or significantly reduces the need for high R-value insulation materials between the brick skins (as required for energy efficiency of alternate lightweight building technologies)

- THERMAL CAPACITY WITH RESISTANCE
  Possesses both thermal properties integral to optimising the benefits of Passive Solar Design

- ENERGY EFFICIENCY
  Assures highest energy ratings most cost effectively

- LIFECYCLE ENERGY
  Proven low and lowest lifecycle energy costs for South Africa’s climates

- REUSABLE
  As masonry or pavers

- RECYCLABLE
  Reused as aggregate for brickmaking and concrete products

- BENIGN IN NATURAL ENVIRONMENTS
  Assured toxic free landfill – from the earth back to the earth