

FACTSHEET #15

The CBA: Serving the industry and South Africa

The Clay Brick Association of South Africa serves its members by expanding support for clay brick masonry, and advising on legislation and good practice. As the industry watchdog, the CBA serves all South Africans as it lobbies for improved building standards with particular emphasis on the affordable housing sector.





CLAY BRICK: SERVING THE INDUSTRY AND SOUTH AFRICA

The Clay Brick Association of South Africa serves its Members by expanding awareness, knowledge and support for clay brick masonry.

“Our goal is to ensure that local property owners achieve long life, good value and sustained performance in the construction of brick walling and paving,” says CBA Executive Director, Jonathan Prior.

“As the industry watchdog, the CBA lobbies for improved building standards, with particular emphasis on the affordable housing sector. We monitor legislative issues and act as the liaison between brick manufacturers, government and the building industry.”

SERVING PROPERTY OWNERS, DEVELOPERS AND BUILDERS

Through technology, the CBA has broadened its education initiatives to meet the needs of home owners, architects, construction professionals and DIY enthusiasts. The Association is renowned for its first-rate technical information, making it easy to efficiently design, detail and build with clay bricks.

The CBA publishes both online and printed educational books and technical guides about building and maintaining bricks and pavers. Our website offers an extensive library of free fact sheets and in-depth articles. The Association’s most popular book “Bricklaying Made Easy” is available from their website.

To assist builders to maintain SANS standards and understand building regulations, the Clay Brick Association presents free lectures at conferences, professional association meetings and academic institutions.

The CBA finalised its Lifecycle Assessment (LCA) of clay brick in 2016 which includes a Socio-Economic LCA, and the findings will soon be released to industry decision-makers. The organisation advises regulatory bodies on topics like energy efficiency during construction and operation, Carbon Tax and SABS standards in masonry.





SERVING BUYERS AND SPECIFIERS



Due to logistics costs, the best price for clay brick products will usually be from the closest supplier. The ClayBrick.org website provides convenient map-based and city-based searches for buyers and quantity surveyors to find clay brick suppliers near their construction site. This saves on material costs while reducing carbon footprint!

The CBA conducts and monitors industry research on brick and other masonry materials to provide specifiers with the latest facts on the properties of clay brick, such as energy savings, thermal comfort and strength.

Clay masonry offers one of the most cost effective ways of introducing thermal mass into a building's design. Their natural insulation properties ensure the moderation of internal temperatures, thus reducing the need for costly heating and cooling, cutting energy usage.

LIAISON WITH GOVERNMENT

The CBA maintains regular contact with the Department of Mines, Minerals and Energy, and the Department of Human Settlements, to ensure government regulations are practical, sustainable, well considered and adhered to.

The CBA fosters a progressive ethic with the vital checks and balances in place to promote stringent quality and operational standards in the industry, in accordance with the stipulated guidelines of SABS 227 for walling and SABS1575 for paving.

Through its multifaceted commitment to the quality and professionalism of the industry, the CBA strives to support proven building technologies.

“The CBA feels very strongly about the quality of housing being supplied to South Africa's disadvantaged communities,” says CBA President Musa Shangase. “Using poor quality, cheaper materials, or experimenting with unproven technologies in low-cost housing has resulted in sub-standard structures that are expensive to heat, cool, repair and maintain.



SERVING THE BRICK MANUFACTURING INDUSTRY

The CBA provides strategic direction for members through its substantial investment in research and educational initiatives. Member companies are continually improving the quality and sustainability of clay masonry products with innovative production methods.

Membership is voluntary, with the prerequisite that members uphold the integrity of the Clay Brick mark and supply only top-grade clay masonry products.

“Our mandate allows members to respond proactively to critical issues, and avoid risks and costs due to lack of knowledge and non-compliance,” states Jonathan Prior.

“We work with manufacturers to foster a quality and sustainability work ethic as well as stringent operating standards. All our members are committed to the production and supply of premium products. Membership is voluntary, with the prerequisite that members uphold the integrity of the Clay Brick mark and supply only top-grade masonry products,” he concludes.

PROMOTING DIVERSITY & TRANSFORMATION

“Like all South African businesses, the clay brick industry NEEDS diversity,” advises CBA President Musa Shangase.

“We need our older employees with their discipline and experience. But we equally need young employees with optimistic, enquiring minds who use technology to drive progress and sustainability. They are the ones who generate business growth by understanding the next generation of home owners, property developers, architects and leaders.



“We need men who understand traditional construction and our customers who are builders, but we equally need women who understand what the market wants in housing, schools and social infrastructure.”

The CBA fully supports the DMR's (Department Mineral Regulation) Mining Charter, and members are encouraged to proactively empower their staff with equity shareholdings, adult-based education and skills development training.



BRINGING INTERNATIONAL RESEARCH TO SA

In early 2016, the Clay Brick Association of South Africa concluded an invaluable agreement with Think Brick of Australia. This gives the Association and its members, access to relevant international research on brick production, thermal performance, energy efficiency and green building practices.

“This data will be used to update and expand industry technical documentation on the efficient and safe use of clay bricks,” says CBA Technical Director, Nico Mienie.



IMPROVING SUSTAINABILITY AND AIR QUALITY

ENERGY EFFICIENT CLAY BRICK is a national drive in partnership with the Swiss Agency for Development & Cooperation (SDC). It educates CBA Members on sustainable manufacturing and firing practices, and provides technology tools and incentives to assess and update production processes. The programme’s goal is to reduce local greenhouse gas emissions.



A recent EECB project assisted researchers from The University of Pretoria (UP) to accurately benchmark air quality and emissions from clamp kilns. Clamp kilns are a common firing method in South Africa, and use coal as a fuel source.

Over 18 months the research team completed 12 successful test firings of their model kiln. Each firing lasted 10-14 days and contained $\pm 25\,000$ bricks from different CBA members. Preliminary results are good news for stakeholders concerned about air pollution. Dr Gerrit Kornelius of the University of Pretoria summarises the findings.

- **Particulate Matter emissions** are significantly lower than estimated – roughly **15%** of the standard factor assumed by government and best-practice literature.
- **Nitrogen Oxide emissions** are moderately lower than the standard factor.
- The kilns do not produce toxic **Nitrogen Dioxide** at all.
- **Sulphur Dioxide emissions** are in direct proportion to SO_2 levels in the fuel (coal).



“The findings on particulates has important implications for brick manufacturers, as well as any other industry working on unpaved roads,” he reports. “Improved dust control for quarries, mines, agricultural facilities and dirt roads in general will significantly improve air quality for local communities. The use of better quality coal during firing will immediately reduce emissions.”

QUALITY STANDARDS

With product quality and performance in mind, Clay Brick manufacturers are focusing on the implementation of ISO and other international quality measurement and management systems that encompass all aspects of the operation.

To support its principles of “give people homes they deserve”, the CBA has invested in two separate research studies to prove the performance of Clay Brick products as the best long-term affordable housing solution.

JOB CREATION & SKILLS DEVELOPMENT

“Creating and supporting local industries that add value to our natural resources is a critical strategy for South Africa,” advises CBA Executive Director, Jonathan Prior.

“The Clay Brick Association is proud to represent a product that is not only 100% natural, but also an important local industry that takes control of the full value chain in clay masonry construction of homes and social infrastructure. Clay brick provides stimulus for local job creation and skills development, while reducing our dependence on imported construction materials.”



For further information:

The Clay Brick Association of South Africa

Website: www.claybrick.org