



FACTSHEET #18

Stress-free construction projects

Clay brick has been the walling material of choice since Roman times because it is practical and cost-effective. It is modular so you only purchase what you need with no waste. Clay bricks are available everywhere, and because it can be supplied and transported in batches, it copes with poor roads and limited space on site.



		SECURE	SAVE	SUSTAIN	STYLE	 environment-friendly
						
		CLAYBRICK.ORG				
		BUILD A LASTING LEGACY				



STRESS FREE PROJECT & SITE MANAGEMENT

Wouldn't life be so much easier if clients never changed their minds? Wouldn't it be nice if all a project manager had to do was track the pre-arranged plan, and could count on a steady supply of electricity from Eskom and the accuracy of the municipal infrastructure plans and policies.

Construction site managers must deal with the weather, local soil conditions, available labour skills and transport issues. Construction projects would be a breeze if ONLY the goal posts didn't keep moving.

One of the reasons why clay brick has been the walling material of choice since Roman times, is due to its inherent flexibility. As a modular material, it isn't pre-configured or manufactured based on a building plan created 6 months before construction starts.

When bricks arrive on site they will never be 20cms too long, or 5cm too thin. Brick dimensions are literally set in clay. There is a rough arithmetical relationship of length to width of 2:1 and length to height of 3:1 in the standard brick. This gives a lot of flexibility in how bricks can be laid.

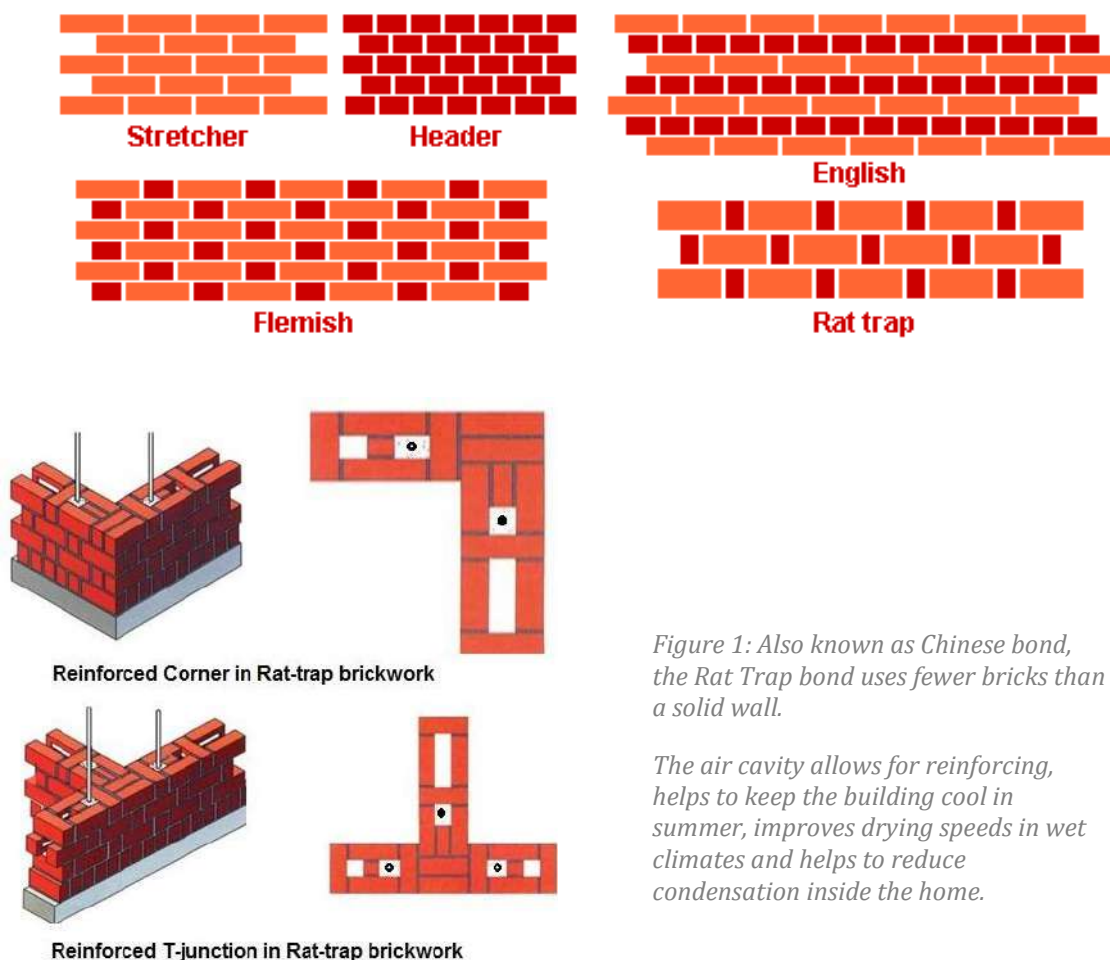


Figure 1: Also known as Chinese bond, the Rat Trap bond uses fewer bricks than a solid wall.

The air cavity allows for reinforcing, helps to keep the building cool in summer, improves drying speeds in wet climates and helps to reduce condensation inside the home.



FLEXIBLE & ADAPTABLE

Modular clay brick walling allows construction teams to quickly adapt to the client's variation requests, respond to unexpected site conditions, implement complex architectural designs and deal with logistics or on-site damage and errors.

Bricks have known parameters for use with different foundations, soils and climate zones, ensuring consistent strength, timing and costs.



Figure 2: Download Technical books and articles on Clay Brick Masonry construction from our website

RELIABLE, ACCURATE PLANNING

One of the key benefits of brick walling is that no matter where you build in South Africa, you have fast access to experienced people and quality products. The clay brick industry in South Africa has both the capacity and the right products to deliver the best, the most cost effective long term solution to residential and commercial building projects.

Competitively-priced, accredited brick suppliers can be found in every region, providing consistent quality stock-in-hand and short transport distances.

Brick products and manufacturing technologies are not imported, every brick is made here in South Africa under well-regulated quality standards.



PROUDLY SOUTH AFRICAN

The Clay Brick Association of South Africa has the responsibility to ensure that our Members conform to legislation regarding air pollution and environmental protection, as well as a strict code of conduct with regard to how bricks are manufactured.

It is estimated that over 200,000 workers are directly employed across the building industry as brick makers, brick layers and plasterers and no matter where the construction site is located there will be trained, local bricklayers to complete the project.



INNOVATIVE “SUPERBRICKS” SAVE TIME AND COSTS

Bricklaying is a skill, and the actual construction phase can be a slower process than many of the new, alternative building systems. The industry has developed an innovative solution that allows walls to be built 2-3 times faster – but with all the benefits of clay brick.

“Superbricks” come in a range of non-standard, large sizes that lower material costs, use less mortar and have fewer joins per square metre. The 140mm wide bricks are popular in the inland regions, where one can build a single wall that not only has even higher strength than a standard size brick, but is also easier to build with and meets SABS10400XA for a single leaf wall.

Notably, for the high rainfall coastal regions, manufacturers have developed brick formats that are narrower and taller than the imperial brick to speed up double skin cavity wall construction.

Fewer bricks per m² afford savings in mortar and faster construction as fewer bricks per m² are laid.

Property owners still enjoy all the benefits of double leaf cavity clay brick walling including improved thermal comfort, improved acoustics and reduced energy use throughout the building’s lifetime.

For further information:

The Clay Brick Association of South Africa
Website: www.claybrick.org



Figure 3: Extra tall...

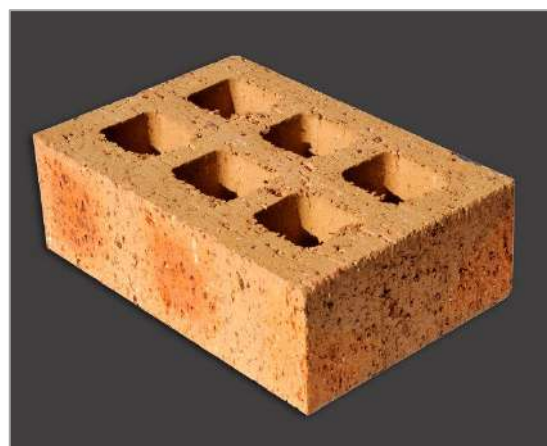


Figure 4: Extra wide...



Figure 5: Narrow but double high for cavity walls. These bricks have been successfully used in cavity walling along the coastal belt