

Why Cape Brick is truly green

BUILDING, being the major economic activity that it is relative to other segments, is also the one area where major energy savings can be achieved. The industry has been aware of this for some time – note the promotional efforts going into ‘green building’ campaigns of late, although many skeptics also dub many of these efforts greenwashing.

This is so because many suppliers to the building industry, using huge advertising and other promotional campaigns, greenwash products that often hold relatively little or no energy savings potential, compared to some other alternatives.

From a design and build

point of view energy savings do not mean only making provision for solar water heating and so on, but in fact runs much deeper. Even – and especially – the bricks one chooses can have a significant impact on the energy used in a development.

One Cape Town manufacturer, Cape Brick, situated in Salt River, seems to have compelling arguments for its business model: it uses almost exclusively recycled aggregates in its production of masonry bricks, blocks as well as decking and retaining wall blocks.

Cape Brick’s director Jacques Tresfon says there are two aspects to energy saving when it comes to masonry products. The

first is to find the product with the lowest embodied energy (the energy required to source the raw materials, manufacture the product and transport it to site), and the second is to use only products that are energy efficient, that is, that have good thermal resistance and insulation properties.

In conjunction with Ross Demolitions, Cape Brick was one of the first masonry manufacturers to set up a crushing facility to reduce construction and demolition waste, consisting of mainly reinforced concrete to recycled crushed aggregate which is then used as the main ingredient in all the company’s products. “In fact, our products contain on aver-

age of 70% recycled material and we use about 70 000 tons of it every year”, Tresfon says.

He points to the following advantages of Cape Brick’s model:

- The construction and demolition waste would normally be dumped in landfill sites, thereby impacting on sensitive areas. Thus, using recycled crushed aggregate, eases the pressure on landfill sites.

- Using this aggregate means that less virgin materials such as sand and stone have to be quarried, thereby directly lessening the mining impact on the environment.

- Cape Brick is only 5 km from the centre city where most demolition

takes place, resulting in important transport energy savings, as most sand and stone quarries are between 15 km and 50 km distance and require a large transport component.

- The quality of the recycled crushed aggregate is actually superior (better shaped) to that of the quarried materials available at a similar price. This means a superior quality end product is produced.

Cape Brick’s own waste products are processed into recycled aggregate and therefore do not have to be disposed of.

“Because of our ability to recycle even our own waste, Cape Brick aims for

a zero percent reject rate, thus ensuring that only the very best quality products reach the customer. The end result is a truly green building material of exceptional quality”, Tresfon says.

Tresfon says his company’s products, thanks to the innovative technique, have less than half the embodied energy, compared to other concrete masonry products and an astounding one-fifth, compared to clay brick products.

Building volumes are down across the board and this has affected Cape Brick’s sales too, but the good news is that there is a growing awareness in the

market – importantly architects and other specifiers too – about Cape Brick’s truly green credentials.

“Whereas a year or two ago architects showed little interest, our green message is now starting to get through – during the past six months we have had numerous specifications for our ‘environmentally friendly’ products, and we conduct on average 1-2 factory tours for professionals each week”, Tresfon says.

He points out that the company is the only brick manufacturer in South Africa currently approved by Eco-Specifier (SA) as being truly environmentally friendly.

Technology development

CAPE Brick was founded in 1938 and occupied the site alongside the Salt River power station in

were originally used to build fortifications during the 2nd World War.

In 1975 with the immi-

continue its operation at the site.

At the end of 1956 the company relocated to the

company’s production capacity as well as increasing production efficiency.

In 2001 the company

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