

# Using recycled crushed aggregates

**Cape Brick produces top-quality concrete products from predominantly recycled crushed aggregates using equipment supplied by Pan Mixers South Africa, says Cape Brick Managing Director, Anthony Gracie.**

“By using Pan Mixers South Africa’s concrete equipment and technology our range of concrete bricks and blocks contain an average of 70% recycled materials. Cape Brick’s wet cast products contain 20% recycled materials, which are mainly sourced from demolition and scrap concrete. “Approximately 70 000 tonnes of recycled material is used by Cape Brick annually to create its masonry products. This equates to around 10% of Cape Town’s total recycled building waste materials. This places the company at the

forefront of recycling in the Western Cape manufacturing industry,” says Gracie.

The RCA-based concrete bricks and blocks are manufactured using a PMSA VB4X brick and block machine and a P1000 pan mixer. Gracie points out that the product’s embodied energy, for the entire product lifecycle, is approximately half that of a standard concrete brick, and around 1/6th of a standard clay brick.

“The use of RCA in the manufacture of concrete masonry products eases the pressure on landfill sites, as less virgin

materials such as sand and stone have to be quarried. This also reduces the mining impact on the environment.”

Despite the fact that recycled materials are used in Cape Brick’s manufacturing process, Gracie stresses that quality is never compromised by the company.

“All of our concrete bricks and blocks conform to SANS 1215 standards, while our wet cast paving products comply with the abrasion standard contained in SANS 1058. What’s more, the quality of the RCA is superior to that of the quarried materials available at a similar price, which results in products that have less environmental impact, and greater value-for-money. Due to our ability to recycle our own waste, we aim for a zero per cent reject rate, ensuring that only the best

quality products reach the customer.”

Gracie highlights the fact that the reliability of the equipment and after-sales support provided by Pan Mixers South Africa play a major role in ensuring that Cape Brick is able to maintain its high standards of quality on a consistent basis. “They have a proven track record of being a reliable equipment supplier for more than 15 years, and we are always guaranteed access to excellent technical support and after-sales service, should we require it.”

Quintin Booysen from Pan Mixers South Africa points out that recycling in the concrete manufacturing process is becoming increasingly important, as businesses and governments become more environmentally-conscious. “As natural resources become increasingly scarce, businesses are beginning to realise that they cannot continue to dump these materials into landfills, for both economic and environmental reasons.”

Booyesen adds, “There is a desire and a will to recycle in Africa, and it is up to local businesses to take the initiative and increase investment in this potentially profitable and sustainable venture, by creating mutually-beneficial partnerships.”

He points out that it is vitally important that the entire process is covered holistically with crushing specialists, concrete manufacturers and logistics companies all getting involved in the venture. ■

