

Corobrik specified for mine housing in the Northern Cape

By [Gary Westwood](#)

7 Feb 2013

South Africa has the largest known deposits of manganese ore in the world and is the largest producer of iron ore on the continent, making mining operations in the arid Northern Cape critical to the national economy and the largest employers in the region.



Production volumes amongst the two biggest players in the region's mining sector: Assmang and Anglo American, continues to increase at a tremendous speed. In order both to cater for new employees and respond within the ambit of the revised mining charter published by government in late 2010, both mining giants are in the throes of creating new and upgrading existing accommodation with a number of housing projects both on the drawing board and under construction.

Greatest contributor to the country's GDP

Corobrik took pride in being a part of the progress of a sector that was the greatest contributor to the country's gross domestic product.

For example, Anglo American's Kumba Iron Ore operation, which is located in Sishen near the town of Kathu, is believed to be one of the seven largest open-pit mines in the world. It produced 38.9 Mtpa in 2011. Kumba is currently building 60 mine management houses with our Blue Barley Travertine and Roan Travertine face bricks. A contract for the construction of a further 479 50m² houses has been awarded to Steffanuti Stocks and is scheduled to begin before year end.

In addition, production at the new Kolomela mine in Posmasburg came on stream in May 2012 and is expected to add additional production of 13Mtpa. This Kolomela mine expansion saw Corobrik delivering some two million Corngold Satins for the building of 400 staff houses. This project has been divided into three projects, namely Postdene, Airfield and Boichoko.

During the apartheid era, the mining sector was known for the appalling living conditions under which its workers lived, which led to a myriad of social ills, including the destruction of the social fabric of communities, substance abuse, as well as the contraction and spread of diseases.

Solid efforts to upgrade housing

Review in 2009 indicated that many mines were making solid efforts to upgrade housing with many moving away from controversial hostel systems to create quality family homes. To build on this, new policy guidelines have since been put in place to ensure that accommodation was not only consistent with international best practices, but also to help facilitate home ownership for all mine employees by 2014. It is a stipulation that home ownership must be both affordable and sustainable.

In meeting the objectives of the mining charter, the use of clay brick in housing projects went a long way to provide both affordable and sustainable housing. Very importantly, a clay brick house meets the aspirational requirements of the prospective homeowners to live in "proper" houses and all the dignity associated with that.

Miners keen to be housed may consider themselves fortunate that South Africa has not compromised and digressed from its well-entrenched masonry tradition and all the associated benefits that clay brick brings to house construction.

A low lifecycle cost

Brick fits all three dimensions of sustainability. At a social level nobody wants the stigma attached to living in a prefabricated box and there is no good reason that they should. Clay brick construction is proven economical as built and its record of performance, its robustness, its durability assures a low lifecycle cost. Add to that, that clay bricks have mineral properties that meet all necessary requirements for healthy living, that clay bricks release no toxic fumes under both normal and fire conditions to impinge on air quality, that they have natural sound insulation properties to support quiet indoor environments and clay bricks sustainable value emerges in a unique holistic context.

In light of the fact that the region bordered the Kalahari Desert and had some of the most acute temperature fluctuations in the country, the energy efficiency that resulted from the use of clay brick was particularly important. The real benefits of clay brick construction are to be realised in our long hot summer months when the natural thermal properties of clay brick help attenuate the impact of high outdoor temperatures indoors.

The value of thermal mass the clay brick walls provide, slows the heat flow to the inside by six to eight hours over the hottest parts of the day, moderating internal conditions and providing target thermal comfort for longer, reducing artificial cooling interventions. Miners won't have the problem of overheating inside so widely associated with insulated lightweight walled Alternate Building Technologies such as Light Steel Frame Building. The use of clay brick in this instance well complements the priority being given to the use of solar power in these projects.

One of the most critical housing projects in the Northern Cape - and one of the greatest challenges faced by the mining industry as a whole - was the resettlement of residents to facilitate the expansion of a mine. Plans are currently being finalised to relocate the entire town of Dingleton, situated 12 kilometres south-west of Kathu, to allow further expansion at the Sishen mine. This will require the building of more than 500 houses as well as schools, police stations and commercial properties.

Assmang owns both manganese and iron ore production facilities in the Northern Cape with its iron ore mines being located in Kathu and Posmasburg and its manganese operations in the towns of Hotazel and Black Rock.

Capital projects delayed

The recent fall in manganese prices has forced them to delay their capital projects in Black Rock and Hotazel. However, we believe these - which include 200 mine houses, a gym, a new guest house and accommodation for 40 students - is expected to go ahead towards the middle of 2013. In Posmasburg, they are currently busy with the construction of some 700 new houses. In Kuruman, 800 houses will be built. The first phase comprises 89 units. A combination of Nevada Travertine, Nebraska Travertine, Corngold Satin and Opal Satins has been specified by Assmang for these projects.

In Kathu, there are plans to build 700 houses. Group 5 is already busy with the construction of 300 houses using our Sapphire Satin, Nevada Travertine, Montana Travertine, Nebraska Travertine and Opal Satin. VHB Developments is also busy with 60 houses which are being built with Sapphire Satin and Corngold Satin. Approximately 200 have already been completed and there are plans to extend the total number of houses to approximately 1000.

Assmang staff homes will be built by the mine with the intention to sell them on to the workers at subsidised rates. To help facilitate this, staff receive a housing allowance of R2500 that can go towards bond repayments whilst they are in Assmang's employ.

ABOUT THE AUTHOR

Gary Westwood is sales manager for the Free State and Northern Cape region of Corobrik.

For more, visit: <https://www.bizcommunity.com>