

# NOW EVEN GOING GREEN CAN GET THE FIVE STAR TREATMENT.



*The new Sisonke District Office in Ixopo is the first provincial government building to achieve a five-star office V1 design rating from the Green Building Council of South Africa. Corobrik's Burnt Apricot face brick has been used in the construction of this KZN Department of Public Work's office.*

As the first provincial government building to achieve a five-star office V1 design rating from the Green Building Council of South Africa (GBCSA), the KwaZulu-Natal Department of Public Works' new Sisonke District Office in Ixopo illustrates that Corobrik bricks present designers with an opportunity to achieve sustainable buildings of quality with due sensitivity to today's key environmental imperatives.

Architect Steve Kinsler specified the use of Burnt Apricot face bricks as well as Corobrik concrete pavers and retaining blocks for this project. "Important considerations were that all building materials had to be sourced locally. The closest factory to the site was our Eston Brick factory from which the Burnt Apricot face brick was procured and supplied," Mike Ingram, Corobrik's Director of Sales for KwaZulu-Natal and Border, explained.

The Green Star rating system awards points for materials sourced from within either a 50km radius of the site or, failing

that, a 400km radius. "Burnt Apricot Satin face bricks and NFX and NFP stock bricks were sourced from the Eston Brick factory located 70kms from the site."

"The office building has a long and narrow form with the north orientation increasing the solar gain in winter and reducing it in summer," Kinsler said, adding that eco-friendly and sustainable features predominated when it came to both practical features and aesthetics. One of the main stipulations was minimisation of energy usage.

The new office block has an extensive roof garden that is home to nearly 100 indigenous plant species. The insulation properties of the building were optimised through the roof garden over the main office spaces and the installation of insulation in the cavities of the brick external walls, below the floors and in the roof.

"Within the environmental sustainability equation, it was a consideration that



Corobrik clay bricks offered embodied energy values in line with international best practice for the technologies employed and with thermal performance properties to support superior thermal comfort and lowest operational energy usage. The many generic factors known to underpin the environmental integrity of Corobrik's products, such as durability and longevity, reusability and recyclability, mineral properties recognised for supporting healthy living, inertness that ensures no release of VOCs, maintenance-free qualities that incur no future carbon debt and natural earthy colours and textures that work so well in natural environments, supported Corobrik's environmental submission," added Kinsler.



Nature will thank you

# WHEN IT COMES TO GREEN, WE'VE EARNED OUR STARS.



The City of Cape Town Human Settlements Contact Office in Manenberg has recently been awarded a 4-Star Green Star SA rating; the first fully constructed local municipal building in South Africa to achieve such a rating.

It is a demonstration of the Cape Town local municipality's commitment to sustainable development and its green goals.

The involvement of the local community was of great importance, for instance the local community were involved in the mosaic work throughout the building. Members of the community worked with a lead artist to produce the images, while the hanging artwork adorning the public hall space was sourced from a local artist.

From a construction point of view, local workers were employed and were taught new building skills.

The choice of materials was critical on this project, understanding the material's embodied energy in its creation as well as its relation to the site. Many different materials were used in the construction of the building. Sandbag construction, FSC timber, reused steel, as well as clay face bricks, chosen for their ecological efficient properties.

"We selected the Corobrik De Hoop Satin brick which is made nearby at the De Hoop factory, an advantage when aiming for a Green Star rating," says Ashley Hemraj who designed the building. "It is important that our public build-



*The City of Cape Town Human Settlements Contact Office in Manenberg has recently been awarded a 4-Star Green Star SA rating. A selection of different materials have been used to create an interesting palette.*

ings stand out from the surrounding buildings and become landmarks and beacons within the communities. It's important that our buildings have a civic presence to them, a stature that speaks of the community and reflects their past, present and individuality. In this case the red brick offered us a unique way in which to identify the municipal building in an aesthetically pleasing and contemporary way and still do it in an environmental responsible way.

A 4 Green Star building breaks even on cost/investment, with significant long-term benefits. We predict that we are saving an estimated R44 000-R48 000 per year in electricity at the City of Cape Town Housing Contact Office. That means that, at today's electricity costs, we will have a payback for the renewable energy component in just 4-5 years. Further to the solar power, a

wind turbine supplements electricity on cloudy or rainy days. The electricity is stored in batteries and can run the building for an estimated three days," says Hemraj. Yet he believes that it's not just all about the construction materials. "The social and economic elements are starting to become an important element of green buildings. Using labour intensive methods of construction should be implemented from as early as the conceptual design stage."

We want the community to be proud of where they live, so that they feel comfortable to reinvest within and remain committed in fighting for a better community environment. We wanted this building to be an inspiration in Manenberg, something that we the City and the community can be proud of" he concludes.



Nature will thank you