BUILDERS' July-august 2022





Corobrik's clay face brick & paving range offers you versatility in design & durability that lasts a lifetime.



Updates on Affordable Housing Project in Nairobi City, Kenya

The housing deficit spares few countries in Africa. A lack of adequate housing affects 14 and 16 million people in Nigeria. South Africa's housing shortage is approximately 3.7 million units. Ghana's sits at 1.7 million units, with the cost of closing the gap estimated at more than US\$50 billion. Kenya, meanwhile, has an annual housing demand of 250,000 units but an estimated supply of only 50,000 units.

Under the affordable housing project in Nairobi, the national government, in conjunction with the Nairobi Metropolitan Service (NMS), has begun a project for the construction of approximately 60,000 houses in Woodley, Maringo, Jericho, Lumumba, Ziwani, Kariobangi, Embakasi, California, Bondeni, and Bahati estates.

The dwellings are anticipated to help alleviate Nairobi's housing shortage, particularly in the Eastlands neighborhood, which is littered with old government buildings. This development comes only a few days after NMS revealed intentions to improve certain Nairobi estates. So far, 760 units in Kariobangi South, Buruburu, Jamhuri, and Kariokor estates have been renovated.

NMS housing and urban renewal deputy director Marion Rono said the project is part of the second phase of the affordable housing programme aimed at addressing the deficit in Nairobi.

The public-private partnership project, which was mooted in January last year, will provide accessible and adequate low-cost housing with reasonable standards of sanitation to meet the huge demand for cheap homes.



Who are we?

A Design Consultancy with experience in Mechanical, Electrical and Public Health Engineering Systems for the Built Environment for clients in Kenya, East Africa & the wider African region.

Our Services

Mechanical and Public Health Services

- · Cold and Hot Water Services
- · Mechanical Ventilation and Air Conditioning Systems
- · Fire Protection Systems
- · Rainwater Harvesting
- · Plumbing, Drainage and Sanitary fittings
- · Solar Hot Water Systems

are proud to be associated Hotani Apartments Kitisuru

- · High and Low Voltage Electrical Distribution Systems
- · Diesel Generator Systems
- · Electrical Lighting and Small Power Systems
- · Lifts and Escalators
- · Building Management Systems
- · Lightning Protection Systems
- · Solar Photovoltaic Systems · Fire Detection and Alarm Systems
- · Security Systems

Contact us through: Designmatic Ltd design#matic@gmail.com

Our philosophy is simple – integrity, efficiency and quality.



Fresh Audit of City Buildings Ahead of Mass Demolitions

Over 600 buildings have been declared unfit for occupation.

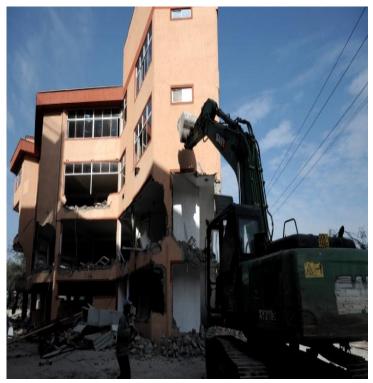


Demolition of Nairobi malls sparks rare barrage of criticism

The exercise is likely to prove very expensive for both the government

As the government intensifies demolition of buildings erected on riparian land, construction professionals are increasingly voicing their concerns over the economic and legal impact of the exercise that has attracted praise and condemnation in equal measure from Kenyans.

The experts argue that while the idea behind demolitions is a noble one, the task is being done in a manner that is likely to prove very expensive for both the government and the economy. The Architectural Association of Kenya (AAK), which says it fully supports the spirit behind the demolitions, is concerned that the flattening of buildings is being done heartlessly without minding innocent victims who stand to lose their livelihoods.



Nairobi county will soon launch an audit of buildings within the city amid rising cases of collapsed buildings in the metropolitan area.

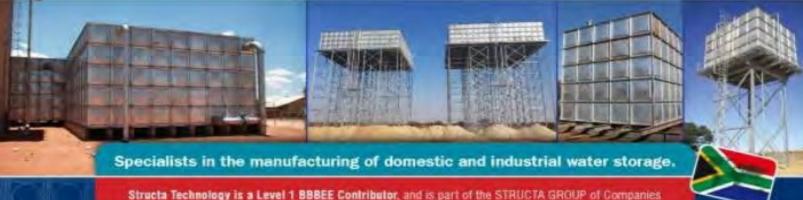
This is after Nairobi Metropolitan Services and the National Building Inspectorate held a meeting last month.

According to NMS, the inspection exercise will focus on structural integrity and safety of buildings in the capital city, with NMS Directorate of Lands, Housing and Urban Development spearheading the exercise.

sustainable & long term WATER STORAGE SOLUTIONS

Pressed Steel Sectional Water Tanks

Prestank tank capacities range from 1 500 litres to 4.2 million litres designed to SANS 10329:2004 guidelines and SANS structural codes. Our Hot Dipped Galvanising units are easily transported and assembled on even the most remote sites.



Structal reconningly is a Level 1 BBBEE Contributor, and is part of the STHUCTA GROUP of Comp.

MEYERTON | Tel: 016 362 9100 watertanks1@structatech.co.za | Director: Rodney Cory rodney@structatech.co.za | 082 575 2275 | www.prestank.co.za



Manufactured in SOUTH AFRICA

AS GREE

- Excellent insulation values
- Certified lifetime guarantee
- Environment Friendly made from 80% recycled newsprint
- · Non toxic and non-irritant
- · Insect and rodent resistant
- Flat roof specialists
- 100% coverage
- Fire resistant

0

œ

>

0

œ

0

u.

GETS

Recycled Product

Thermguard Insulation is manufactured from an incredible 80% recycled newsprint and thus is extremely environmentally friendly. A number of harmless household chemicals are added to make the product fire retardant and insect rodent resistant.

Double Green Effect

Thermguard is used in buildings to conserve energy, which ultimately slows the burning of fossil fuels that create greenhouse gases. Newsprint that would often be discarded on landfill sites to decompose and also emit greenhouse gases is recycled to create this eco-friendly product. This dual reduction in air pollution amounts to a "Double Green Effect".











HOLLEY HARVEYFILE, 29 WIGANTHORPE RD, WILLOWTON TEL: 033-3940221 EMAIL: greg@holleyharveyfile.co.za

<u>Builders Adopt New Technology to Cut Costs.</u> **EPS PANELS**

Property developers are adopting alternative building technologies in a bid to tackle rising construction costs without compromising on the quality of structures.

Among the popular alternative building technologies in Kenya is the EPS building technology, which involves construction of houses by assembling expanded polystyrene (EPS) panels, sandwiched between a steel wire mesh that is plastered on both sides with concrete.



EPS panels, a white foam plastic material made from solid beads of polystyrene, are manufactured in a factory and transported to the site for assembly, which



Multi-storey buildings

Despite the low weight, modular houses are strong enough to withstand natural calamities better than houses build using conventional building materials.

A 35ml concreting of EPS panels as well as plaster finishes of 15ml on both sides of the wall results in a thickness equivalent to a 9X9 building block.

EPS building technology cost

In terms of EPS building technology cost in Kenya, Juma said the panels are usually produced in different modules and variations of wall and slab panes with varying prices. "For instance, a builder can construct a wall using EPS panels for Sh1,800 per square metre and a slab for Sh2,350 per square metre,".



P.O. Box 664 - 00606 Sarit Centre.

Nairobi, Kenya.

Tel: +254 020-44 51 422/44 53 089

Telefax :44 51 423

Mobile: +254 722 861 473 / +254 733 850 848

Wireless: +254-020-528 77 29

Email: info@sandpconsult.co.ke, syldon@sandpconsult.co.ke

S&P Departments:

Syldoninfra

SyldonServ

SyldonPower

SyldonTel

SyldonEnv













Syldon and Partners is a wholly Kenya owned limited liability firm established in May, 2000 in Kenya to undertake consultancy services in design, installation and maintenance of Electrical, Mechanical Services and Management Information Systems (MIS), Civil and Structural works.

There are two directors, Eng. G.N. Olando - Managing Director in charge of all Electrical Services and general management of the firm. Eng. Calleb Olali is Director in-charge of mechanical services. Other core staff members include Assistant Electrical Engineer John Ruddy Munda and Assistant Mechanical Engineer Felix Ollando.

> Eng. H.S Roopra, Eng. Peter Chege are associates of the firm and backstops Eng. Olando and Eng. Olali in all electrical and mechanical assignments respectively. Eng. Victor Ongewa and Eng. Cyrus Njungu are associates in-charge of power sub-stations and transmission/distribution lines respectively.







SOUTH AFRICA'S 3D PRONTING CONSTRUCTION TECH



President Cyril Ramaphosa recently announced that government is to pilot 3D printed homes. This is good news for the country's housing crisis as around 20% of South Africa's urban households live in informal settlements. But is South Africa's construction industry ready for 3D printing?

Databuild CEO Morag Evans believes it is. "The sooner our construction industry embraces 3D printing technology, the sooner we will reap its manifold benefits," she says.

3D printing is not new to construction. Since the first 3D-printed commercial building was constructed in Dubai in 2016, the technology has been used all over the world – including Africa – to create office spaces, homes, schools and even pedestrian bridges. Indeed, Malawi recently became home to the continent's first 3D-printed house and the world's first 3D-printed school.

The technology involves the use of enormous 3D printers which extrude or 'print' layers of a specially mixed material, not unlike concrete, to create the required structure.

"The beauty of the technology is that it is significantly quicker to execute, with projects being completed in a fraction of the time it would take using conventional construction methods. For example, it can take up to several weeks or even months to build an average-sized home, but with 3D-printing technology a residence can be constructed in less than 24 hours."

Cost-effective builds

3D printing also facilitates savings on production costs, Evans continues.

"Because the printer uses the precise amount of materials needed for the build, accurate materials quantities can be ordered, which means little to no construction waste is generated on site. Additionally, the printer receives dimensions from a software program, so the structures produced are virtually error-free, which results in further cost savings."

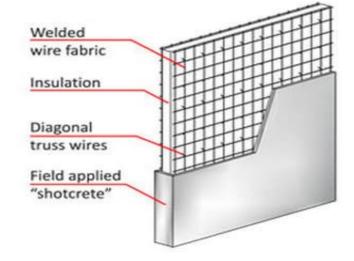
comes to worker safety. Risky construction activities, as well as site and environment conditions are the main contributing factors to accidents and fatalities on construction sites.

Evans points out that 3D printing only enables the frame and walls of a building to be constructed. "Windows, plumbing, electricity and other elements must be installed separately so the demand for jobs in these areas will remain."

More and more construction role players are committing to green design and sustainable construction practices. Consequently, as 3D printing technology matures, it won't be long before 3D-printed



While the use of EPS panels is a relatively new building technology in Kenya, the technique has been extensively used in developed countries for many years due to its durability, lightweight, ease of installation and cost-saving benefits.



Other benefits of the technology include thermal insulation, which keeps a house cool regardless of temperature changes as well as a high resistance to fire and other shocks.

Houses built using the EPS building technology are sound and bullet proof, and they do not attract termites, rats and other pests since the material does not have any nutritional value.

EPS panels disadvantages

One of the major disadvantages of EPS technology is that polystyrene is an oil-based product that is not easily recyclable on an industrial scale.

As such, EPS foam often ends up in nature where it is not degradable and is, instead, atomized into small parts that are harmful to humans and animals in the long run.

TOUGH TIMES FOR BUILDERS AS STEEL

PRICES HIT THE ROOF

The prices of steel, a key input in construction, have soared to great heights over the past few weeks on supply fears related to the Russia-Ukraine war, with the conflict and ensuing Western sanctions raising disruption fears.

Data from the London Metal Exchange, the centre for industrial metals trading, show that global steel prices are up 14%



The prices of steel, a key input in construction, have soared to great heights over the past few weeks on supply fears related to the Russia-Ukraine war, with the conflict and ensuing Western sanctions raising disruption fears.

Data from the London Metal Exchange, the centre for industrial metals trading, show that global steel prices are up 14% since Russia invaded Ukraine on Feb. 24.



The price escalation, which is piling financial pressure on builders, has been occasioned by economic sanctions against Russia by the European Union which forbids trading, and a prohibition on trade to some Ukrainian regions.

Construction costs

Local steel producers, who purchase their raw materials outside the country, have been forced to hike their prices in line with the current surge in global prices.

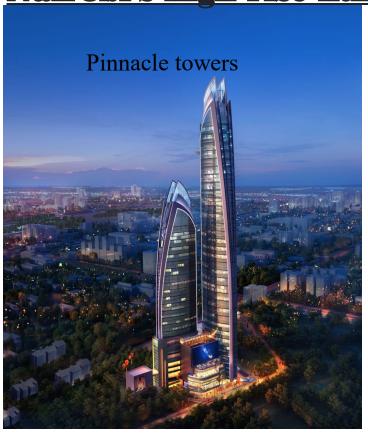
Steel accounts for about 10% of the <u>construction costs</u> for high-rises.

"The prices have been increasing almost on a daily basis since the beginning of this month due to high raw material costs



Race for the skies grinds to a halt in

Nairobi's high-rise hub



Pinnacle Towers, once expected to be Africa's tallest *building* and whose foundation in Upper Hill already been dug, *stalled*.

The development is a joint venture by Hass Petroleum an East African petroleum products distributor and the White Lotus Group, a Dubai-based investment firm. The White Lotus Conglomerate is run by Indian businessman and godman Vijaykumar Naidu, otherwise known as Kalki Bhagwan.

There have been hurdles: some thought to do with financing; others posed by court cases.

Owners of a disputed piece of land adjacent to The Pinnacle site had gone to court as far back as 2016 and accused The Pinnacle management of trespassing through debris and construction equipment.

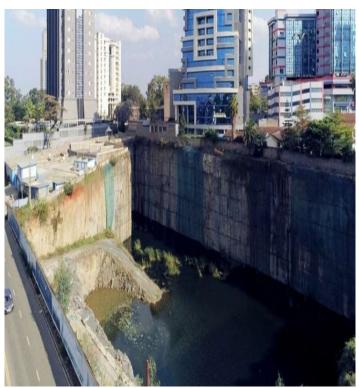
The case was filed by James Mugoya through his Kingorani Investments and a trust formed by former United Arab Emir-

Following the complicated and vicious court battle, the developers dropped their use of the adjacent pieces of land for storage, ending the controversy.

The High Court, in February 2019, issued a warrant of arrest for Mohamud Mahat Noor and Poosapati Ramachandra Raju Sita – the real estate tycoons behind the construction of The Pinnacle Tower – after they failed to appear for sentencing in a contempt of court case.

What happened to the Pinnacle Tower?

The developers said demolitions of properties in parts of Nairobi from 2018 greatly impacted on international financing, leading to lowering of confidence in the Kenyan building and construction sector. As a result, the foreign investors abandoned the project in 2019.



Developers say Pinnacle Towers project not dead



- Timesaving by using gas mixtures for calibration
- NO PC necessary
- Reduced maintenance costs

GFG GWS

GAS WARNING SYSTEM

- Ideal for use on underground drill rigs, electric locos. winches etc.
- Flame proof enclosure.
- Available with or without battery back-up.
- 3 digit LED display for gas concentration & adjustment parameters.
- Potential free contacts available.
- Available with flame proof audible & visual alarm.
- Up to 4 transmitters.

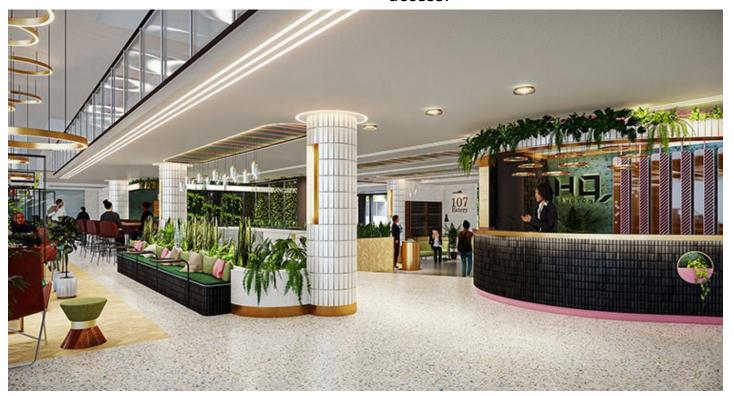




These apartments, situated in Johannesburg's most desirable districts, offer modern design and premium facilities while catering to a range of lifestyles.

With South African interest rates at an alltime low, now is a good time to be looking at property investment; and in the City of Gold, there are a range of hot new apartment blocks boasting modern designs that cater to a wide variety of requirements. Whether apartment seekers are looking for a high-energy lifestyle in burgeoning city hubs, or family-friendly living with easy access to parks, hospitals and schools; there's sure to be a shining new development with exactly their needs in mind.

Amenities: Gym, rooftop restaurant and bar, rooftop garden, swimming pool, outdoor games area, board room, work lounges and pods, laundry services, 24 hour security and biometric access.







Offices
Bloemfontein
Cape Town
Dubai
Durban
Johannesburg
Nigeria
Pietermaritzburg
Pretoria
Qatar
Rustenburg
Saudi Arabia
Stellenbosch
Windhoek

RECEIVED AN AWARD FROM THE GREEN BUILDING COUNCIL







www.deleeuwgroup.com

THE MEDIAN ROSEBANK

Developed by: Renprop

Location: Corner Cradock and Tyrwhitt Avenues

You could hardly live closer to Rosebank's biggest attractions than at this new residential building that is steadily nearing completion (opening March 2021). Located right on the doorstep of The

Zone@Rosebank, the Rosebank Gautrain station is a mere two-minute walk away. The Median offers 1, 2 and 3 bedroom apartments and penthouses, all of which come fitted with high-speed fibre, SMEG appliances and gas stoves.



The Tyrwhitt Rosebank

Developed by: Grapnel / Renprop

Location: Corner Tyrwhitt and Bath Avenue

Completed in 2020 The Tyrwhitt is now one of Rosebank's biggest residential buildings with 219 units, ranging in size from $54m^2$ to $135m^2$ as well as $260m^2$ penthouse apartments on the top floors. The views over the surrounding suburbs from the north-facing balconies are quite simply spectacular. Amenities at the 14-storey building include state-of-the-art security, a generator, fast fibre-optic internet and a 24-hour concierge service.

The Tyrwhitt is located in the heart of Rosebank, within 50 metres of the Rosebank Mall and 300 metres from the Gautrain station.

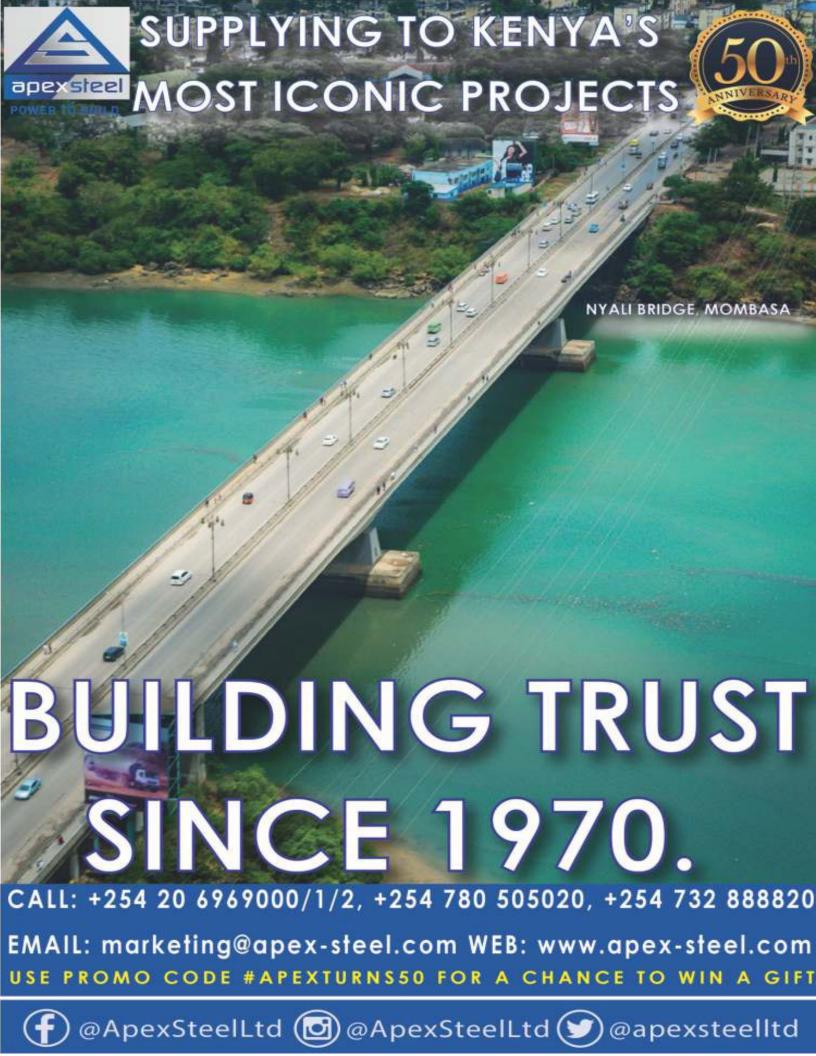




Fantastically priced apartments in the heart of Rosebank without compromising on quality and style. The Tyrwhitt offers luxury apartments to investors and professionals in Johannesburg's most desirable "work, live and play" neighborhood.

Let The Tyrwhitt tell your story through a contemporary, comfortable living environment offering multiple apartment options.





144 OXFORD ROAD

Developed by: Growth Point **Location:** 144 Oxford Road

This distinctive new building on Oxford Road (opposite the Hyatt Hotel), offers 36,700m² of office space over nine floors (with a further six levels of basement parking), and has been designed to meet the increasing demand for high-quality office space in Rosebank. The building is flanked by two extended office towers that are connected by a central atrium, consisting of 9 floors and 6 levels of basement parking.

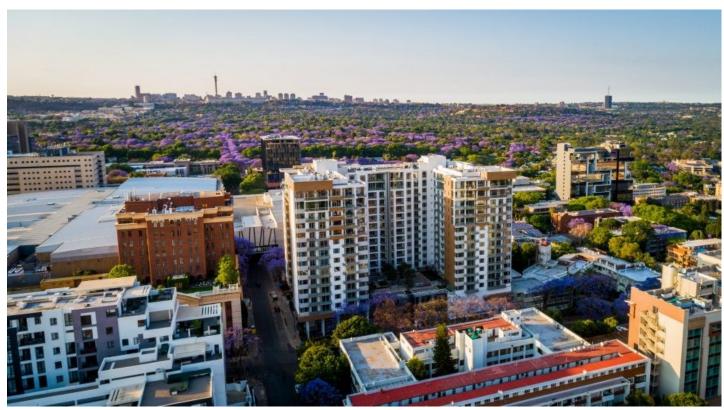




Sustainability features at 144 Oxford Road include an energy-efficient air conditioning system with a full economy cycle that supplies full fresh air from outside whenever possible (a particularly important ventilation feature in our new pandemic-era), energy-efficient lighting and water-wise features like a rainwater harvesting system, water-efficient landscaping and water-efficient fixtures.

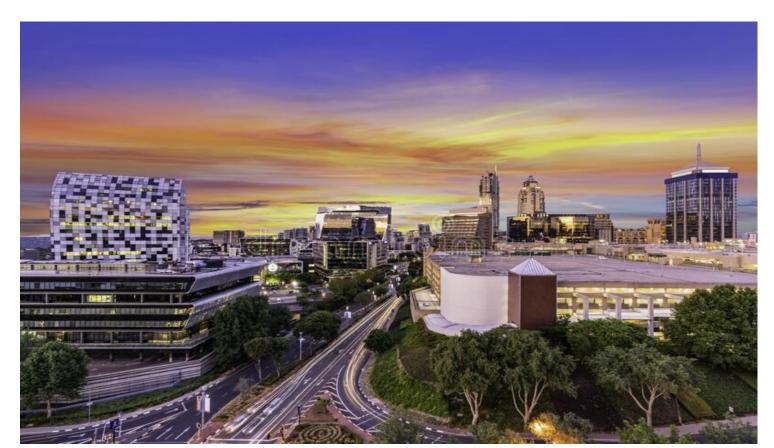
Among the biggest tenants who will be moving into the now completed building in 2021 is mining giant Anglo American, who are relocating from the Johannesburg CBD.

NEW BUILDINGS CHANGING THE ROSEBANK SKYLINE



Rosebank is one of South Africa's fastest growing business districts. A testament to Rosebank's ever-growing popularity as a compact, diverse and walkable 'live, work, play' district,

over the past two years a number of new commercial and residential buildings have launched in Rosebank.



The Bank

Developed by: Blend Properties

Location: Corner Cradock and Tyrwhitt Avenues



This exciting mixed-use development in the heart of Rosebank's shopping precinct is steadily nearing completion and is scheduled to open in March 2021. The building's black facebrick facade with touches of greenery is certainly eyecatching with many locals on social media comparing it to a Manhatten apartment block.

The 12-storey, 4,300m² development (which also has three floors of basement parking) will be home to the first voco™ hotel in Africa, by international hotel group IHG. There will also be co-working space by Workshop 17 (who also have premises in Rosebank's The Firestation), as well as conferencing facilities, office space and on the ground floor,

opening out onto the pedestrianized section of Tyrwhitt Avenue, restaurants and retail space. Meanwhile on the roof will be a garden with views over the city.

Like most new Rosebank buildings, The Bank strives for sustainable practices and will make use of renewable energy sources including solar power and a heat recovery system that re-uses generated heat for water for the hotel.



Park Central

Developed by: Redefine Properties **Location:** 6 Keyes Avenue



One of Redefine Properties' latest luxury residential developments is Park Central in Rosebank with 159 high-end apartments, studios and penthouses. At 20-storeys this is now one of the tallest buildings in Rosebank and its distinctive facade includes several 'sky gardens' leading out of its most luxurious apartments.

Park Central offers its residents a range of high-end urban-living amenities including concierge services, a gym and a rooftop swimming pool and terrace. Also available to residents is an exclusive venue for private events which has its own gourmet kitchen.

Contributing to the principles of environmentally sustainable development in Rosebank, the facade has been designed to be energy efficient and the building offers LED lighting and a gas-heated centralized hot water system.









YOUR GATEWAY TO PROJECTS NEWS IN KENYA







- humphrey@buildersmagazine.co.ke
- **J** 0794513375
- P.O Box 2014-20116 Gilgil
- buildersmagazine.co.ke