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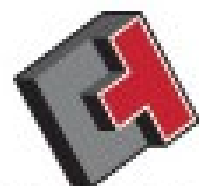
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## FROM THE DESK *of the president*



John Matthews  
President, Master Builders South Africa

# HOLDING PATTERN

If South Africa were on a plane, it would be in a holding pattern, with nowhere to safely land, and awaiting the all-clear from the control tower. Noises from the tower indicate that we might be getting close to a safe-ish landing, but our air traffic controller is cautious in the extreme when he appears on our screens with his somber greeting, quoting numbers like 5,4,3,2 and one.

There's no such thing as a totally safe landing in South Africa right now, or anywhere else in the world, even in those places where the curve is a nearly flat line. However, notwithstanding the toxic conspiracy chatter on social media, South Africa has up to now followed the rules and made new ones to the best of its ability. But the lockdown has nevertheless taken a toll on lives, livelihoods and mental health. It has, though, also bought time to boost the capacity of our medical services - time that we all fervently hope is being used to best advantage.

What happens next is still in the hands of a higher authority.

All of us in the construction industry know already, that the plan we advocated last year - for the industry to take matters into its own hands and try to improve the lot of the many thousands involved - has come to pass.

The Construction Covid-19 Rapid Response Task Team CC19RRTT, was born of intense debate on how to approach and address both the effects of the pandemic on our industry and the underlying problems that existed well before the advent of the virus. The team has already strongly motivated for the

phased reactivation of the construction industry.

It's highly logical - there were projects in an advanced stage of development before Covid-19, and by their nature they offer among the safest possible form of work vis-à-vis the virus. The building industry generally has the larger spaces in which to work, that facilitate measures to avoid transmission of the infection. In support of the argument for a staged return to work for the construction industry, is the fact that if left unfinished, the partly completed projects will deteriorate or be vandalised perhaps beyond hope of recovery.

As the Chair of the Task Team, I, with my colleagues, acknowledged the necessity of the lockdown and the positive impact it had in preventing cases of occupationally acquired infections, and we as an industry have also had time to strengthen existing health and safety systems.

But we are, as is the rest of South Africa, sharply aware that continued inactivity will destroy our economy and damage the very lives that the lockdown was designed to save. So, taking everything into consideration, on balance, the need for the regeneration of our industry and all others, is vital to the economic survival of our country.

I would like to see, as would we all, some light on the horizon, but as I have mentioned in my comments before, predictions of any kind in this current climate are at best, shots in the dark.

We can only hope for a time soon, when our optimistic forecasts can share the average success rate of shooting fish in a barrel. ■





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The official journal of Master Builders South Africa

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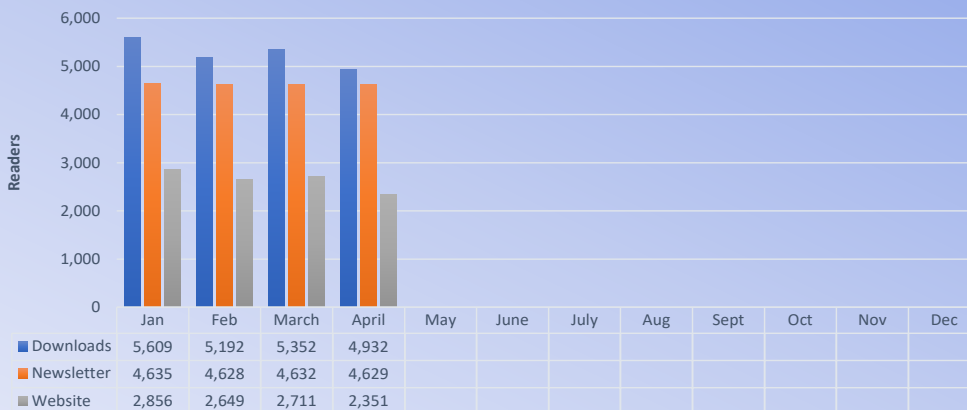
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## CHS MBA North Forum Meeting Highlights

**A**s the construction industry prepares to get back to work, the Association is preparing our members to comply to the Department of Employment & Labour standards as far as Occupational Health & Safety for Covid-19.

Inspector Siphokazi Kope from the Department of Employment and Labour went through the minimum requirements for the Covid-19 compliant risk assessment, PPE (masks, gloves etc) and sanitiser (70% alcohol). It is the duty of the employer to ensure that the workplace is without risk / hazards and that all the requirements are being applied.

This is not new to the industry as OHS compliance has formed part of the work we do for decades. Please be aware that as a contractor you are only required to follow the minimum requirements of the Department of Employment and Labour. You will find that there are costly solutions being offered that are not a requirement. The real risk is preventing your employees from contracting Covid-19 as far as possible.

Regarding FEM (Federated Employers Mutual Assurance) accident stats, Herman Enoch said that the construction industry was at a standstill. If a worker were to contract Covid-19 on a worksite, the procedure would be to report the incident to the line manager, who would complete the WCL2 form, and that the case would be procedurally treated the same as a case of malaria regarding the paperwork.

However, it would be difficult to ascertain whether the worker contracted the virus as a result of being on a worksite or not, and this would be adjudicated by auditors, with the employer informed of the status of the claim. The Covid Task Team is responsible to government departments, and FEM would reimburse the cost of private Covid-19 testing only if the case was positive.

MBA North will be providing the latest checklists to members as they are updated.

### COVID-19 tests:

Rapid tests not recommended as they only detect virus eight days after contraction, which means that an individual will test negative while continuing to infect other people before the eight-day mark. The PCR test is legal and is the most accurate test from the meeting.

### Workman's Compensation:

FEM explained what to do when an employee contracts Covid-19 as a result of work exposure and highlighted that no cases have been reported to them yet. FEM would be able to determine via investigation if the contraction of Covid-19 resulted from exposure at the workplace.

MBA North will assist our members throughout the lockdown as follows:

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# Construction Sector Welcomes Easing Of Lockdown Under Level 3

The construction industry welcomed President Cyril Ramaphosa's announcement of the country moving to Level 3 as from 1 June 2020. The sector had been calling for an immediate re-activation of live construction sites that were at various stages of completion when the lockdown came into effect on the 27 March 2020.

Chairperson of the Construction Covid-19 Rapid Response Task Team, Mr John Matthews, acknowledged that the easing of lockdown meant that a lot of construction companies on the verge of collapse could be saved. "We are optimistic that allowing the construction sector to resume full operations will salvage what is left of the sector. We are pleased that the government gave consideration to the concerns we raised and agreed to a full re-activation of the sector under Level 3. Continued restraints on construction activity was leading us towards a situation where there was little hope of a recovery for a lot of companies in the industry," said Matthews.

On measures to contain the spread of the Coronavirus disease on construction sites, he added that there was a need for companies to adhere to the strict health and safety protocols that were already in place, for protection of employees. He highlighted the need for self-regulation by all employers in the industry, emphasizing the call by President Ramaphosa that combating the spread of the disease was in the hands of everyone.

"It is not up to the government to try and monitor every office and construction site, but each and every employer has a responsibility to ensure that the health and safety of employees is guaranteed. The industry has health and safety protocols already in place and any employer in the sector who needs assistance should contact their Association for guidance and support," said Matthews.

As one of the major economic contributors to the economy and because of construction work being largely labour intensive, the industry has been touted as one of the sectors that the government should prioritise to increase work opportunities and revive the South African economy.

The Construction COVID-19 Rapid Response Task Team ("CC19RRTT") is an industry grouping that was convened to charter a recovery plan for the construction sector. It incorporates the entire construction value chain covering suppliers, manufacturers, property developers, built environment professionals and contractors (main contractors and subcontractors).

## Participating organisations include:

Master Builders South Africa (MBSA), The Association of South African Quantity Surveyors (ASAQS), Western Cape Property Development Forum (WCPDF), South African Institute of Architects (SAIA), Black Business



John Matthews, President, Master Builders South Africa

Council in the Built Environment (BBCBE), Consulting Engineers South Africa (CESA), Association of Construction Project Managers (ACPM), The South African Institution of Civil Engineering (SAICE), South African Black Technical and Allied Careers Organisation (SABTACO), South African Women in Construction and Built Environment (SAWIC & BE), The Concrete Institute of South Africa (TCI), Cox Yeats Attorneys, South African Geomatics Institute (SAGI), National Construction Incubator (NCI), Institute for Landscape Architecture in South Africa (ILASA), Construction Management Foundation (CMF), Association of Construction Health and Safety Management (ACHASM), Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA), The Federated Employers Mutual Assurance Company (FEM), Concrete Manufacturers Association (CMA), ASPASA, Clay Brick Association of South Africa, South African Institute of Black Property Practitioners (SAIBPP), Council for the Built Environment (CBE), National Spa & Pool Institute of Southern Africa (NSPI), South African Property Owners Association (SAPOA), South African Affordable Residential Developers Association, (SAARDA), South African Association of Consulting Professional Planners (SAACPP), Southern African Plastic Pipe Manufacturers Association (SAPPMA), Chartered Institute of Building (CIOB), South African Green Industry Council (SAGIC), South African Paint Manufacturing Association (SAPMA), Builders Warehouse (Suppliers and Manufacturing), and Master Builders KwaZulu-Natal (MBA KZN) as the Convener. ■

# Extracts From “Preparing The Workplace For Coronavirus”

by Dr Mpume Ndaba, Occupational Medicine Specialist, NIOH

**T**he Covid-19 virus has a fragile outer membrane: it is less stable in the environment and can be killed by simple disinfectants. Survival time in the environment depends on

- pH
- Inoculum size (required concentration of expected microorganism for a standard test)
- Dryness
- Temperature
- Exposure to disinfectants (common disinfectants such as 70% ethanol and bleach can kill the virus)
- Type of surface

## Workplace Preparedness

- Anticipated number of staff
- Opening up of services (employee-public shared spaces)
- Risk assessment (potential risk of transmission)

These include operations, activities and shared spaces (among employees and employees / public). Workplace changes include considerations such as

- Engineering controls (strategies designed to protect workers from hazardous conditions by placing a barrier between the worker and the hazard)
- Admin controls (training, procedure, policy, or shift designs that lessen the threat of a hazard to an individual)
- Substitution (removing the hazard from the workplace)
- PPE (personal protective equipment)

## Administration

- Observe social distancing
- More office space / working offsite
- Workplace facilities
- Access control-staff, visitors, dedicated streamlined / controlled access

## Non-Medical Management Preparations

- Debriefing staff about new changes
- Psychosocial support
- New work organisation
- Access control
- Spatial arrangements
- Review cleaning and disinfection procedures

## Training and Awareness

- Sensitise skeleton staff
- Communicate with staff at home
- Key operational people (HR / access control personnel)
- Procedures to be followed
- Procedure review
- Confidentiality vs public health outbreak

## Primary Prevention

- Minimise risks of transmission in the workplace. HRA (health reimbursement arrangement) including controls (Engineering, Administrative and PPE)
- Business continuity and pandemic preparedness policies
- Education and training / risk communication
- Minimise risks of transmission in the workplace
- Screening and identification of potentially affected employees, limit contact and movement
- Social distancing
- Promote regular and thorough handwashing by employees, contractors and customers
- Respiratory hygiene
- Avoid touching your face, especially while working
- Encourage / insist that symptomatic persons stay away / self-isolate

## Workplace Practices to Review

- Mass gathering (water/coffee stations, common areas)
- Waiting areas - clinic, medicals, etc.
- Meetings (forums)
- Specific procedures: spirometry (measuring lung function) - consider method and assess risk, breathalysers (safety risk), etc.
- Access control methods (biometrics, signing-in with common material such as pens)
- Public spaces and workers

## Medical Management

- Workplace cleaning and disinfection protocols
- Medical fitness issues and returning to work
- Mental health issues
- Impairment assessment / compensation
- Work restrictions ■



# Construction Industry Medical Scheme At The Ready To Support Sector And Its Employees

“In this time of health crisis, President Ramphosa’s powerful call for common action has galvanised the nation to unite in the fight against the spread of the novel coronavirus. Government has inspired South Africans of all socio-economic groups and backgrounds to stand united and to work together to overcome the Covid-19 challenge.”

“We want to provide members and their employers in the building, construction and engineering sectors as well as open cast mining the assurance that BCIMA will pay claims for Covid-19, as per the normal scheme rules and benefits,” said Phumelele Makatini, CEO and Principal Officer of the Building and Construction Industry Medical Aid Fund (BCIMA).

BCIMA, which was established 50 years ago to provide effective, value for money medical cover for employees in the building, construction and civil engineering sector, not only has a proud record but is one of South Africa’s financially strongest schemes.

Makatini explained that it is “now more important than ever” for those who work within the building, construction and civil engineering sectors to be able to access the medical care that they may need in the coming weeks.

Her clarion call to employers is to safeguard their employees, particularly those who work on contract, to ensure that they can access healthcare in their time of need.

“Now is definitely not the time to leave your employees and their families out in the cold and uncovered – to the contrary, this is the perfect time to go the extra mile for your workforce to ensure that they remain healthy and are ready to return to work once we have weathered the storm.

“Once business returns to normality, which it will, you will need your experienced stalwarts and many more capable pairs of hands as it will be all hands on decks to catch up on productive time that has been lost. I firmly believe that our great quest will be to turn the South African economy around together.

With BCIMA, members are not governed by network restrictions but are instead afforded freedom of choice in selecting healthcare service providers across the board, from private hospitals to traditional healers and homeopaths.

The medical scheme offers several one-of-a-kind benefits including a lifetime membership number



Phumelele Makatini, CEO and Principal Officer of BCIMA

and the ability to be covered only for the duration of a contract, and benefits tailored to meet the needs of employees who are paid hourly rates. Only the main member pays a contribution while other registered family members are covered for free with contributions based on income.

“Given the successes of BCIMA in bringing quality healthcare to employees in the low-cost healthcare market, we believe that the scheme’s expertise and insight make it the ideal partner to the sector and its employees, particularly at this critical point in our history.”

“On behalf of BCIMA, I would like to wish our members and all South Africans well as they navigate through the challenges imposed upon their daily lives by this pandemic and lockdown. Let us continue to stand firmly together as South Africans to resist this common threat that we all face,” she concludes. ■

# COVID-19



## Return To Work: Construction Sites

The protocols below will apply at all times where a main contractor is responsible for capital works, maintenance works or EPWP projects. Save for the possibility that the site may not be fenced off as in the case of a traditional site, all OHS Act responsibilities remain together with Covid-19 Health and Safety Measures, which should be conducted at the meeting or assembly points generally required for employees and sub-contractors performing maintenance or EPWP type work.

### HAZARD AND RISK CONTROLS

#### Resumption of operations

- Security will record the reading of the temperatures taken for individuals. Persons performing these duties shall wear masks at all times whilst doing so
- Security taking temperature readings will use a clipboard and disposable pens – only receptionists will record the readings of temperature readings at access points
- If temperature is above 37<sup>o</sup>, wait five minutes and retake temperature. If temperature is above 37,3<sup>o</sup> do not allow access, report to management for further action
- Take every person's temperature entering the premises
- Ensure queue control at access points – stand 2m apart from each other
- Management to conduct Covid-19 induction screening and awareness programme, together with PPE training before allowing employees to proceed to their workstations
- Allocate hand sanitizer stations at access points – every person must sanitise their hands prior entering the premises
- Each person entering the premises will be required to sign the Covid19 declaration and assessment form
- Conduct Covid-19 induction programme

- Issue all employees with additional PPE face masks

#### Premises access control

- All other safety monitoring equipment employed such as alcometers shall be the contactless type or be fitted with disposable mouthpieces. Such equipment shall be sanitised after every use
- Security will ensure that non-essential visitors are not allowed access to a construction site
- Contractors will monitor site access points to enable social distancing – contractors may need to change the number of access points, either increase to reduce congestion or decrease to enable monitoring
- Allow plenty of space (2m) between people waiting to enter site
- Remove or disable entry systems that require skin contact, eg fingerprint scanners or biometric system

#### Food handling processes and canteen service

- Management must ensure that different lunch and teatime breaks allocated – to minimise the amount of people accessing canteen areas at a time. Social distancing must be enforced at all times
- Measure and monitor the implementation of the requirements for canteen service providers
- Canteen areas will be disinfected at least twice a day
- Canteen service provider must provide management with a detailed awareness and training, health and hygiene programme
- Disinfecting stations must be allocated cash points
- Food service staff must be issued with masks and disposable surgical gloves
- Self-service food stations must not be allowed
- Employees will not be permitted to buy food outside of the premises during working hours and shall bring their own lunch if they do not plan to use the canteen facilities

- Break times should always be staggered to reduce congestion and contact
- Workers should sit 2m apart from each other whilst eating and avoid all contact
- Disposable plates and cutlery must be used at all times
- Workers should be asked to bring pre-prepared meals and refillable drinking bottles from home to the extent possible
- All rubbish should be put straight in the bin by each user
- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, vending machines and payment devices

#### **Employees required to travel**

- Employees
- Delivery Staff
- Critical business travel (locally)
- Employees using public transport to commute between home and work are to adhere to the strict rules determined for such travel by the Minister of Transport. Such employees shall be issued with masks by the employer as well as hand sanitiser that will be used according to the training provided at the place of employment
- In the event that the employer provides transport, this will be done in accordance with the same regulations that apply to that for public transport providers
- Employees using company vehicles shall be limited to two per bakkie and three per sedan. Employees exceeding one in number shall use masks when travelling in company vehicles.
- Hand sanitiser shall be provided for each company vehicle
- Communication plans such as Skype, Zoom, telephone conferences, WhatsApp video calls or Google workplace video calls will be used to limit the amount of business travel requirements
- Delivery staff and truck drivers will be issued with hand sanitisers – this must be kept in their vehicle
- Non-alcoholic swabs will be issued to truck drivers in the event of testing requested by clients
- Truck drivers shall declare any symptoms that might be linked to the Covid -19 virus to management
- Trucks will be decontaminated after deliveries and at the end of each shift – decontamination can be done with soap and water
- Drivers will be scanned by security with infrared temperature devices every time they enter the premises
- Site premises shall be entered for emergency maintenance of equipment when a contractor/ service provider needs to access equipment on site requiring attention or when a supplier of materials is required to access the premises. Premises access control measures shall apply in these cases
- Sub-contractors that are on site full time will be

required to comply with all protocols as those that are applicable to employees

- Management will communicate the company emergency response plans to clients, suppliers and service providers
- The aim is to maintain a relationship and understanding of the benefits of the implemented mitigation
- Where critical business meetings are required, the premises' access control measures shall apply in these cases

#### **Workplace hygiene**

- Rest room facilities will be limited as a measure of control to ensure that facilities are effectively disinfected
- Rest room facilities will be disinfected at least twice a day
- Office environments will be disinfected at least twice a day – this includes offices, meetings rooms, staircase handrails, doorknobs and lift buttons
- Hand disinfecting stations will be provided at every entrance into the building including rest room facilities
- Workplace stations will be disinfected with soap and water after every tea and lunch break
- Any touch system computerised screen will be disinfected with a 60% alcohol-based sanitiser
- Changeroom and washroom facilities for employees will be disinfected at least twice a day
- Employees will always be required to place personal belongings in personal lockers provided in change rooms
- Workplace stations in production areas will be disinfected at least twice a day

#### **Awareness and training programmes**

- Only internal programmes of this nature will be allowed and limited to small groups of no more than 15 people per session.
- People must stand or sit at least 2m apart from each other
- The area will be well ventilated and must have enough space for the purpose of awareness programmes
- Hand sanitisers must be available in the area and people must wear masks
- Where tables and chairs are used for such sessions, these shall be disinfected after every session

#### **Office environment meetings**

- Office meetings will be kept to a limit of four people at a time
- People must sit at least 2m apart from each other
- Hand sanitisers must be available during the meeting
- Office tables and chairs will be disinfected after every meeting ■

# Extracts from “Covid-19 Management Roles And Responsibilities”

By Michelle Morgan. Deputy SHE Manager, NHLS Safety Health & Environment Department

Every workplace (laboratories, offices, workshops, etc) must ensure that there is a risk assessment in place. The risk assessment must be reviewed to include the risk of exposure to Covid-19. For each identified risk, appropriate risk control measures should be selected and implemented in order to mitigate the residual risk to an acceptable level.

The approved risk assessment must be recorded and communicated to all staff in the workplace. Staff must read and familiarise themselves with the contents of the risk assessment.

## SECTION 13: DUTY TO INFORM

- As far as is reasonably practicable, every employee is to be made conversant with the hazards to their health and safety attached to any work which they have to perform, any article or substance which they have to produce, process, use, handle, store or transport and any plant or machinery which they are required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards
- Inform the health and safety representatives concerned beforehand of inspections, investigations or formal inquiries of which they have been notified by an inspector
- Inform a health and safety representative as soon as reasonably practicable of the occurrence of an incident in the workplace or section of the workplace for which such representative has been designated



## PERSONAL SAFETY EQUIPMENT AND FACILITIES

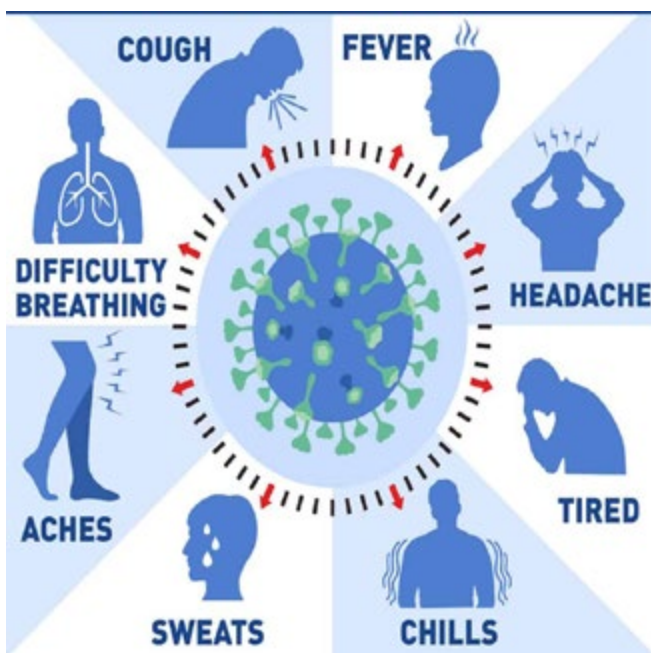
- Employer must provide free of charge safety equipment and facilities to staff
- Maintain safety equipment in a good clean condition
- Safety equipment must not be removed from the workplace
- Employer to instruct employees on the proper use, maintenance and limitations of equipment and facilities

## STRATEGIES TO CONSIDER IN CONTROLLING COVID

- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer
- Avoid touching your eyes, nose, and mouth with unwashed hands
- Avoid close contact with people who are sick
- Stay home when you are sick
- Try to keep distance from others at home or in the workplace, including in the tearoom or at your work station
- Cover your cough or sneeze with a flexed elbow or a tissue, then throw the tissue in the bin

## GENERAL PRECAUTIONS TO BE OBSERVED

- Clean and disinfect frequently touched objects and surfaces, eg office desks, door handles, telephones etc
- Recommendation for international business travel to be prohibited in line with governments pronouncements. All local business travel must be limited. Where possible, use technology to further business requirements.
- There is currently no vaccine for COVID-1; however, all staff are encouraged to get the flu vaccine.
- Ensure your general health is maintained and chronic diseases are well-controlled ■



# Extracts From “Ergonomics In Construction: Where Does It Hurt?”

By John Smallwood And Claire Deacon from Nelson Mandela University

Construction is physically demanding. The nature of construction work helps to explain why injuries, such as strains, sprains, and WMSDs (work-related musculoskeletal disorders), are so prevalent in the industry:

- Lifting heavy loads
- Performing repetitive tasks
- Frequent bending and twisting of the body
- Working above shoulder height
- Working below knee level
- Manual handling of heavy and irregular-sized loads
- Adopting awkward work postures
- Working in confined spaces
- Holding the same position for long periods
- Forceful exertion
- Working under hot and cold temperatures / weather

All of which are inherent H&S (health and safety) risks and unfavourable ergonomic practices. Given the aforementioned, a study was conducted to determine, inter alia:

- The frequency of ergonomics problems encountered by workers
- Actions / Interventions, in general, which would make workers' work easier
- The frequency at which workers use and experience pain in 32 anatomic regions

## Conclusions

Sprains, strains and MSDs predominate in terms of the nature of injuries in construction internationally

- It is notable that in this study there is a shift in the extent to which ergonomic problems were experienced. Exposure to noise, bending or twisting the back, repetitive movements, working in awkward positions, and handling heavy materials predominated
- The prevalence of the predominating ergonomic problems is reinforced by the ergonomic aspects which predominate in terms of the degree of attention required, namely: having things within easy reach; being able to stand; adjustable work surfaces, and mechanical assistance (conveyors or hoist)
- The feet, upper arms, and left knee are the anatomic regions mostly used
- The lower back predominates in terms of the anatomic regions where pain is experienced, followed distantly by both feet, and the upper back



## Recommendations

- Construction workers need to optimise the deployment of their labour, by considering multi-skilling, and rotation of labour (where the risks relative to an activity cannot be changed)
- Housekeeping should be at an optimum level to avert back injuries from materials handling and working in static positions for extended periods of time
- Educational programmes, which address workplace posture and lifting techniques, should be implemented during induction and “toolbox talks”
- A pre-work stretching programme should be considered as warming up prepares the body for the physical work ahead, and could assist to minimise the risk
- Clients and designers have a role to play in the assessing the ergonomic risks during the design phase of a project to limit the risk of injury to workers
- Ongoing occupational health programmes at pre-employment and periodically through the life of a project is recommended. Such programmes could limit the potential of occupational injuries and diseases related to physical labour
- Addressing the use of access scaffolding and working platforms on structures could assist with keeping workers upright, and ensuring excavations or working areas are large enough to allow workers to change position frequently
- Designers should make optimum use of precast structures, and other elements of structural frames, decks of bridges, and facilitate pre-assembly of elements in general
- The use of materials handling equipment should be maximised, and simple aspects such as placement of materials and tools can be very effective at no extra cost ■



## Extracts From “Rope Access Masterclass”

by Heinrich Schröder, [Gravity Group](#)

**T**his technique uses ropes incorporating two separately secured systems – one as a means of access and the other as backup security. If any point should fail, another point catches the fall.

This is used in conjunction with a harness in combination with other devices for getting to and from the place of work / work positioning. Origins include work on the Eiffel Tower, Empire State Building and Mount Rushmore. In addition to these origins, rock climbers and cavers were called on to work on oil rigs as they were technically capable and manoeuvrable.

Rope Access Institutional Body frameworks include the [irata](#), the international regulatory body, and [The Institute For Work At Height](#), which is the registered professional body in SA for working at heights and is NQS certified. Both institutions recommend double rope manoeuvres and techniques, and have the same supervision standards.

If there are no governing bodies or regulations regarding working at height in a country, considerations should include what the client requirements are and the policies of the practicing company itself. It is however possible to use rope access principles in order to conduct work.

The Level One Rope Access Technician course offered by [Gravity Training](#), part of the Gravity Group, is comprehensive and teaches, amongst other procedures specific to the scope of work required, ascent, descent, and how to pass knots.

### Why rope access?

It is a cost-effective solution for mobile elevated work platforms, and is time efficient, safe and clean (environmentally friendly).

### Where can rope access be used?

- Window cleaning and painting
- Construction and building maintenance
- Offshore / oil & gas
- Power generation (chipping off old sediment)
- Telecommunications (bottom of monopole & access crows' nests, side of buildings for antennas)
- Renewable energy

### Rope access standards & regulations

Construction Regulations 10 and 18 (specific to rope access) concern fall protection planning eg rescue. ISO 22836 – 102 (adopted by IWH)

Rope access levels: Level 1 (US 230060) aids technicians in climbing and performing rescues

Level 2 (US 229996)

Level 3 (Masters) (US 229997 & 230001)

### Site classifications

#### Simple sites

- Access to worksite unaffected by adjacent work (eg welding)
- Anchor lines follow simple path from anchor point to ground / platform

#### Complex sites

- Rope access – moving horizontally (left to right)
- Worksite access affected by adjacent work
- Level 3 technician to supervise

#### Anchor point selection

- The importance of qualified installers is evident as one point in the system may not be as strong as the others
- Planned EN – 795
- Self-identified, eg pillar

#### Equipment requirements

- Camp GT Harness
- EN 361, 358 sufficient to do fall arrest work
- Clear difference between a 4-point harness for fall arrest and a 5-point harness for rope access
- Camp Titan Helmet (EN 12492 with chin strap)
- Dynamic Cow Tail Set (EN 892)
- Camp Descender Giant (EN 341, 12841)
- Camp Turbo Chest and Hand Ascender (EN 567)
- Camp Goblin Fall Arrester

#### Rescues

- CR 18
- Contractor must ensure adequate measures in place to allow procedures to commence immediately in the event of a fall incident taking place
- A level 3 technician should not have to be rescued – this means an insufficient risk assessment
- Beware of angles – the higher the angle, the more tension there is on the rope, no more than 120 degrees ■

# Q&A With Njombo Lekula, Managing Director At PPC RSA

**W**hat impact is the crisis having on the cement industry as a whole?

Our focus has continued to demonstrate sustainable value for all our stakeholders. For this reason, we are not able to provide a detailed review of the impact of Covid-19 on the business. This is because the business and all our employees across the continent have continued to find new and exciting ways to empower communities to experience a better quality of life. Our customer-focused approach to our operations has ensured we go beyond in our provision of quality materials and solutions.

A few operations are supplying to customers that produce essential products as classified by the Lockdown Regulations issued by the governments across our operations. These, for example, include the supply of lime to the water treatment facilities to enable the provision of water services, the agricultural sector and food production facilities, the power and petrochemical production plants.

**What specific business continuity solutions is PPC implementing at this time?**

Covid-19 has given us the opportunity to empower our employees to experience a better quality of life. Working with our partners, we are implementing the recommendations of the WHO guidelines and the Government directive, implementing necessary procedures to assist with us in this fight. Our priority remains prevention, with a focus on personal hygiene and travel. As such, we are requesting self-declaration from all our respective stakeholders, customers, partners and employees in respect of the following:

- The protocols that the company or service provider has in place to detect potential infections to minimise the spread of such infections;
- Declaration of any employee/s who have travelled abroad in the last four weeks, who are working in our operations and central services areas;
- If an employee has travelled abroad, specifically to Covid-19 hot zones that the employee not be allowed to access our operations for 21 days;
- If the services can be provided remotely, such options should be taken;
- Employee awareness and educational programmes and how these could assist our response plans.

**What best practice solutions do you have for construction businesses and the industry as a whole at this time?**

Focus on your employees as they remain key in our efforts to drive business continuity. Be sure to engage your



Njombo Lekula, PPC RSA MD

stakeholders and managers in the process too as you work to keep your teams engaged. Ensure the teams have a platform for communication as you create opportunities for the business to operate in line with Covid-19 regulations. PPC has established a sanitary baseline across its operations to ensure hygiene standards are adhered to. Individuals who visit our premises are required to be wearing the relevant Covid-19 PPE in addition to complying with PPC Safety, Health, Environment and Quality (SHEQ) conditions.

**Anything else you want to share?**

During these uncertain times, PPC Limited remains committed to empowering communities to experience a better quality of life; we have therefore taken all the preventative measures to safeguard the health and wellness of all our stakeholders. We thank all our employees and partners for remaining truthful and committed to ensuring that we provide a safe and supportive environment – as we probe new ways to continue operations through the COVID-19 pandemic period and beyond. ■

## Grinaker-LTA Welcomes Infrastructure Build Programme Aimed At Kickstarting The Economy

President Cyril Ramaphosa and the South African government are to be commended for their balanced response to the COVID-19 global crisis – a challenge some world leaders have inadequately handled.

The social relief and economic support package announced by the President last night are signs of responsible and good leadership in the new world order we inhabit: a people-centred world and global economy.

As a business, Grinaker-LTA welcomes the President's emphasised commitment to the implementation of a "substantial infrastructure build programme" to help the South African economy recover from COVID-19. This is a much-needed confidence boost for the construction sector, which is a key sector for the economy. Grinaker-LTA is eagerly awaiting the easing and lifting of the lockdown so we can resume projects we had to halt.

We however welcome and appreciate the importance of measures to re-open the sector in a responsible manner, as we have to balance the priority of our continued financial sustainability with preventing further loss of lives.

The implementation of the lockdown was obviously less than ideal though necessary. Grinaker-LTA, however, is raring to go as soon as it is lifted.

We have used the opportunity to take stock of the business and the industry and remain convinced of the opportunities available in the sector.



Bhekani Mdlalose, Grinaker-LTA  
Group Managing Director

Grinaker-LTA has seen many a recession and crisis in its over 119-year history – this resiliency and focused management will ensure that we come out a lot stronger post COVID-19. ■

## Motheo Construction Group Announces Its New Shareholding Structure

Motheo Construction Group, a leading predominantly black-owned Level 1 B-BBEE construction company, announced its new shareholding structure on 14 April 2020. Post the tragic passing of Dr Thandi Ndlovu, an icon in South Africa's struggle movement and construction industry, and in line with her vision and heart for Motheo Construction Group, the Motheo family announces eight new shareholders to the Motheo fold.

After much consideration and thought, current CEO, Lettie Mashau, announced the inclusion of the new shareholders: "With its strong mentorship culture, Motheo has always had the vision to grow from within. In line with Dr Ndlovu and the other founders' vision, the task in restructuring our shareholding held two key guiding principles in mind:

1. Maintain an owner-managed business.
2. Empower from within.

"Motheo is a family and as such have chosen to keep the Motheo culture and family strong, vibrant and thriving.

"To this end we selected our new shareholders from within Team Motheo itself. Key longstanding and up-and-coming staff were earmarked and given the option to buy into Motheo. Current shareholders, in line with position and authority, were offered additional shares.

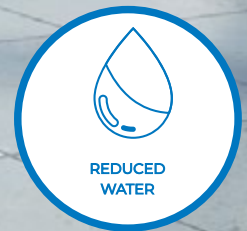
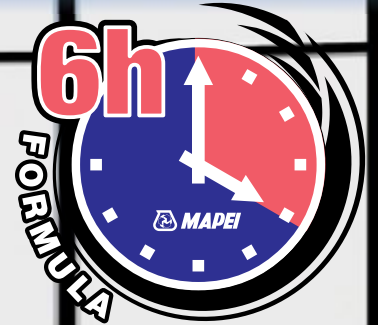
"Our new shareholders include two black females (bringing the total to seven) and six black males. Motheo now has 13 black shareholders holding 51,5% of the Motheo shares; 35% being black female and 16,5% black male. The overwhelming response from all those included in this grouping was 'yes'.

"For Motheo this recent restructuring is just the start. We hope to share more news in the not-too-distant future. Motheo's flag continues to fly high. From a solid foundation we look to continue the climb, making our founders proud. Our legacy calls for the new generation of the Motheo family to flourish and in their honour, we aim to do just that. Over the past three years Motheo has seen a 32% year-on-year growth." ■



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# Concrete Institute: Concrete Reservoirs Vital During Drought

The devastating drought in many parts of South Africa has increased awareness about the need for effective water storage, particularly in rural areas. "It is therefore important that more rural local authorities realise that even relatively small concrete water reservoirs, strategically placed, can play a vital role in sustaining struggling rural communities," says Bryan Perrie, MD of The Concrete Institute.



Bryan Perrie, MD,  
The Concrete Institute

Perrie says the local authorities should follow the example of hundreds of South African farmers and smallholding owners who have for three decades referred to *Farm Reservoirs*, the Concrete Institute's most popular and durable publication, to build reservoirs on their properties.

"The Concrete Institute would be prepared to provide supplementary advice to any local authority planning to build farm reservoirs to serve people living in isolated areas without, with limited, or drought-disrupted municipal services," he adds.

First published in 1984 and revised nine years ago, *Farm Reservoirs* is a manual dealing with the use of concrete for water retaining structures for irrigation, watering stock, farm reservoirs, swimming pools, and household use.

The 52-page, A4 publication deals with the construction of circular reservoirs with reinforced concrete walls, as well as those with walls of fired clay bricks, concrete masonry, and corrugated galvanised steel. Guidelines for reservoirs built with travelling moulds are included. Rectangular reservoirs and swimming pools, elliptical swimming pools, and drinking troughs are the topics of other chapters; while data for estimating the quantities of materials required is also provided.

"The manual has enabled owners of farm reservoirs to build a structure that will be serviceable for many years with the ability of retaining considerable water pressures when full. Concrete farm reservoirs are also a familiar sight in most of South Africa's major national parks, and sustain wildlife in these game reserves during the frequent droughts that strike many of these sanctuaries," Perrie concludes. ■

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# The Construction Sector: Empowerment Through Female Leadership

In an industry that is predominantly male-dominated, the need to transform various aspects of the construction sector is paramount, particularly if it is to remain economically viable in a country that is economically strained. In the past two years, massive job cuts, liquidations and gender discrimination within the sector have been a cause for concern with little to no change or solutions proposed to help stabilise this important sector.

Established in 2006, the National Construction Incubator (NCI), which was formerly known as The SEDA Construction Incubator (SCI) is actively working towards reforms in the construction sector to address a number of issues:

- **Women empowerment:** The NCI has recently made a milestone in making the construction field one that is inclusive and equal. The company now comprises of 83% female senior management, with Dr Joy Ndlovu chairing the board, something that would not have been possible in 2006 when the organisation first started. Dr Ndlovu's areas of strength lie in her advocacy for entrepreneurship, leadership and management. This is a game-changer as many women still struggle to break into the industry and establish themselves against their counterparts due to discrimination.
- **Development and mentorship:** StatsSA reported as many as 30 000 job cuts in the construction sector in the year of 2019. This is incredibly disheartening and calls for development of emerging contractors and mentorships to help remedy the situation by reimagining the models in place within the industry. Through the infusion of both technical and business administration skills that are aligned



Dr Joy Ndlovu, Board Chairperson, NCI

with the introduction of technology in order to enhance the efficiency and management of businesses, the industry can thrive again.

- **Job creation:** Giving support to contractors through funding, mentorship and interpersonal development has been at the heart of the work that the NCI does and has proven to be efficient; testament to that, they have managed to create 139 temporal jobs and managed to exceed their job creation target by 3%. These growth points are a massive win within the industry as they are geared towards strengthening the sector.

Accessibility is an important aspect of growth that the NCI has identified and made means to address, particularly for those contractors who have struggled to get funding, mentorship and assistance in setting themselves up within the industry. The NCI has since opened a new branch in Empangeni, KwaZulu Natal through a new partnership and will be launching a second branch in the same region, uMhlathuze Municipality. This was done to ensure inclusivity and access across many of the marginalized areas in and around KwaZulu Natal.

With the strides that the new NCI is making in sustaining the industry through various changes aimed at growth, the organisation is in the forefront of creating opportunities to improve the sector through its strategic positioning. Ultimately, the sector will continue to develop and contribute to the economy of the country by implementing innovative and just means in redressing the stifling elements that have long crippled the construction industry. ■



Patt Chalwa, CEO, NCI

# Concrete Low-Volume Roads An Option For Rural Areas

**W**ith poor rural gravel roads causing horrific accidents, The Concrete Institute (TCI) feels there is substantial scope for more low-volume concrete roads to increase road safety in South Africa.

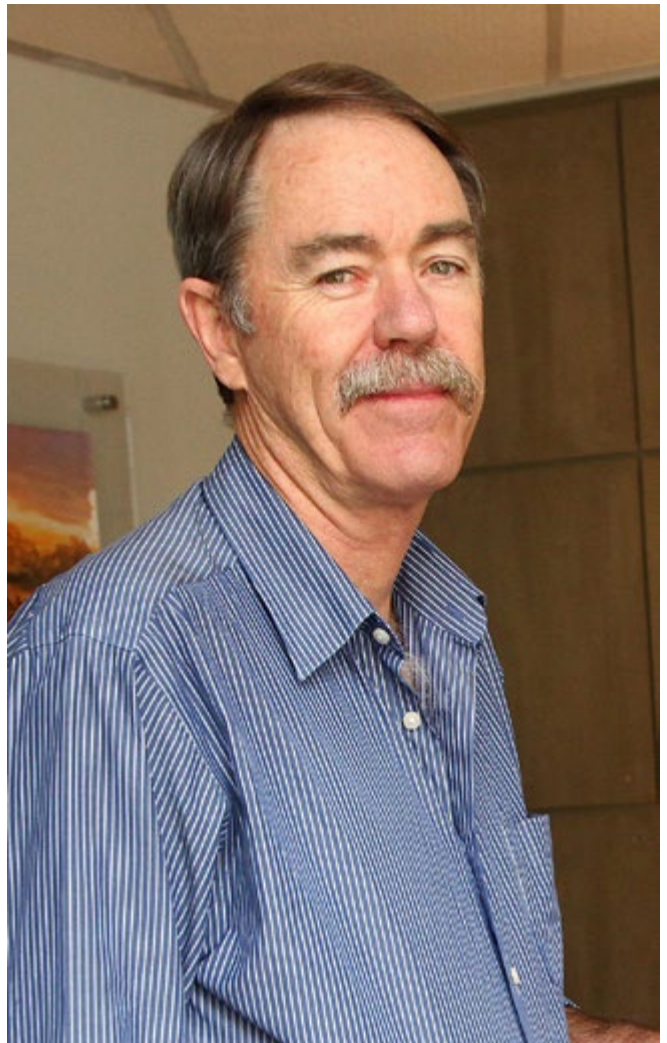
Bryan Perrie, MD of TCI, says jointed in situ (poured in place) concrete can be used to construct economical and durable rural low-volume roads – basically used as access roads or farm-to market pavements designed to handle speeds of up to 90 kilometres per hour in unpopulated areas and up to 65km per hour speeds as low-volume city roads. “But the mixes for use in concrete roads should be designed by an approved concrete testing laboratory or TCI should be approached for advice on materials and mix proportions,” Perrie cautions.

Perrie says economy, ease of construction and maintenance considerations make unreinforced jointed pavements (JCP) ideal for low-volume roads and streets. “In jointed low-volume roads, pavements, load transfer by aggregate interlock is generally adequate. When close joint spacings are used, reinforcing steel is not needed but reinforcing mesh should be used in odd-shaped panels and for those with manholes and other openings.”

Joints are provided in concrete pavements to:

- Limit stresses and control cracking resulting from restrained contraction and the effects of restrained warping and traffic loads.
- To facilitate construction and level control.
- To accommodate movements.

Joints must provide adequate load transfer to ensure adequate performance of the pavement. This can be achieved by the use of sawn construction joints at relatively close spacings and keyways at construction joints.



Bryan Perrie, MD,  
The Concrete Institute

Perrie says the correct choice of materials is vital for the construction of durable low-volume concrete roads. Cement should be CEM I or CEM II A 42.5 or higher complying with the requirements of SANS 50197. Where extenders (ground granulated blast furnace slag or fly ash) are used, these should comply with the requirements of SANS 50450 and SANS 55167. When extenders are used, allowances should be made in the concrete mix design, particularly with regard to early strength under field conditions to ensure timeous cutting of joints. Curing methods and regimes may also have to be improved, especially in inclement weather.

“Satisfactory aggregates for use in low-volume concrete roads and streets are those that comply generally with ‘SANS 1083 Aggregates for Concrete’. In addition, the fine aggregate should possess an acid insolubility of at least 40% for skid resistance. This requirement is satisfied when quartzose sand is used. Calcareous sands, such as dolomite, are acceptable if blended with at least 40% of a suitable quartzose sand.”



Perrie says the mixing water should be clean potable water or other water free of substances that may impair the strength, the setting time, or the durability of the concrete, or the strength and durability of any reinforcement.

"Under certain circumstances, the properties of the concrete may be improved by the proper use of chemical admixtures, such as water-reducing admixtures. Their use should be based on an evaluation of their effects on specific materials and combinations of materials, including strength development, particularly within the first 24 hours after concrete placing.

"This is because certain admixtures may retard the setting and strength development of the concrete, thus delaying joint sawing and increasing the risk of random cracking.

"The concrete should be strong enough to ensure a hard, durable, skid-resistant surface and to accommodate the tensile stresses resulting from shrinkage, warping and loading. This requirement is satisfied by specifying a target flexural strength or modulus of rupture (third-point loading, determined in accordance with SANS 864) of not less than 4.5 MPa at 28 days.

"Proper drainage is also essential to prolong the lifespan of low-volume concrete pavements. Experience has shown

that inadequate drainage is probably responsible for more pavement distress in Southern Africa than inadequate structural or material design. The design philosophy is to provide effective drainage so that the pavement structure is prevented from becoming saturated. Both the discharge of surface run-off and the control of subsurface water need to be considered. Consequently, effective drainage is essential for good pavement performance, and is assumed in structural design.

"Surface run-off can be controlled in the rural environment by constructing sufficiently wide side drains which discharge at sufficiently frequent intervals into the adjacent land, or into culverts that carry the water to suitable discharge points. In the urban environment, it can be controlled with the use of kerb and channel systems discharging into inlets into a storm water pipe system.

In order to reduce costs for low-volume roads, consideration should be given to dishing the road surface and carrying the storm water on the road surface to suitable discharge points," Perrie concludes.

A detailed publication *Low-volume Concrete Roads* is available for free downloading from The Concrete Institute website, [www.theconcreteinstitute.org.za](http://www.theconcreteinstitute.org.za) or phone 011 315 0300 for more information. ■



## The PIRB Certificate Of Compliance (CoC) And Audit Process Play An Integral Part In The Construction Sector

While plumbers are responsible for the installation, repair and maintaining of pipes, fixtures and other plumbing works for water distribution and wastewater disposal in various buildings, their role in the construction sector is ultimately very important “because plumbing protects the safety of people.”

### Plumbing done right

According to Herman Strauss from the Plumbing Industry Registration Board (PIRB), plumbing is more than a convenience. “We know that not having water, or having blocked drains are a nuisance, but it is about much more than that,” he said. “Disease can spread through drainage pipework and affect communities.”

There has even been reports that the world’s latest health pandemic, the Coronavirus (Covid-19) can spread this way. “On the supply side, hot water is critically needed but if plumbing is not done right, geysers can explode and cause death and structural damage. If the water is not hot enough lethal bacteria like Legionella can spread causing the lethal Legionnaires’ disease. On the other hand, if the water at the tap is too hot it can cause potentially life-threatening scalding in seconds.”

Therefore, it is said that if plumbing is done right, it improves health and safety and make our lives better, while plumbing that’s been done wrong can have lethal implications on a large scale.

### About the PIRB CoC

As the professional body for plumbers in South Africa, the PIRB is responsible for managing the CoC system. It is a legal requirement for a PIRB CoC to be issued when plumbing work is done on a geyser, a solar water heater or a heat pump. These certificates are ultimately issued by licensed plumbers to certify that their plumbing work complies with all regulatory installation requirements.

“We are fortunate that South Africa has very good plumbing standards that ensure the safety of the plumbing

installations, Strauss explains. “This is provided that the above-mentioned standards are complied with.”

Strauss also says that to promote the level of such professional services, the South African Government is increasingly relying on professional bodies for the different industries to monitor the level of work done by its members.

“In the plumbing industry, CoCs are used by the PIRB to monitor plumbing work and to improve compliance to the legislative standards. When a plumber issues a CoC it is his legal self-declaration that the work is safe and complies with all requirements. Permanent records are held by the PIRB of all CoCs issued. The PIRB goes further to proactively audits a percentage of the CoCs issued.”

### About the PIRB audits process

These audits were implemented because if the policing of standards and laws are left unchecked, it becomes meaningless. The PIRB appointed the Institute of Plumbing South Africa (IOPSA) to perform these audits on behalf of the PIRB.

Carrying out a physical inspection or audit ensures that plumbing regulations, standards and laws are upheld which creates fair, accountable and an equitable environment for all to operate in. That’s why 5% of CoCs are audited.

“If errors are identified, the plumber is compelled to return to site to fix it. In cases where the plumber was not up to date with the latest safety requirements, this helps to upskill the plumber so that future installations will be safe.

In some cases, where plumbers were negligent, it allows for a disciplinary process to be followed against such plumbers.”

These audits ultimately create a reassurance that the CoC is not just a piece of paper. Therefore, it is clear exactly how the plumbing CoC and audit process play an integral part in the construction sector. ■

# Axor Places of Origin: Culture of Craftsmanship

*Wood: Art Can Be Timeless*

With the brand campaign, Axor Places, launching this spring, the design brand explores the very personal Places of Memory of well-known design partners, such as Jean-Marie Massaud, Phoenix Design or Barber & Osgerby. "We connected the very personal 'Places of Memory' of Axor design partners with the individualisation possibilities that the Axor MyEdition faucet collection offers: maximum freedom in the choice of materiality for the mounting plate", explains Anke Sohn, Head of AXOR Brand Marketing. She continues: "Inspired by the recollection of a certain encounter, of a mood, of an adventure, of a 'place of memory', we transport a certain material that is reminiscent of that place into the here and now. Thus a piece of the world materialises in the appearance of the individual faucet".

Not only the material's origin, but also its journey of conversion is considered. "With portraits of craftsmen, we are not only focusing on our design partners and the creatives behind the brand, but also on the craft itself, the materiality, and the origin of our products," Sohn continues.

The finest materials give Axor MyEdition an exclusive appearance: marble, wood, leather. Highly specialised enterprises process them near the brand's headquarters in the Black Forest. The spirit of artisan manufacturing still prevails in the workshops: passionate master craftsmen and women process our raw materials to perfection. Not only does Axor value these skilled experts, but they are also in demand for outfitting high-quality yachts and private jets. Overall, the perfect combination of material and craftsmanship with short transportation distances and regional strengths over the long term.

"Walnut is one of the most beautiful high-grade woods," Jürgen Gaiser, Master Carpenter, says. The walnut used for the plate of the Axor MyEdition collection comes from



sustainably managed forests in North America and Canada. It is cultivated and processed according to socially and ecologically responsible aspects. The tree is cut down, the logs sawed and then sliced in the veneer preparation area. Only inspected pieces with perfect grain are considered. The fine wood veneers are glued to each other by hand. Veneer strips are glued together crosswise to form a stable bond so that the wood does not warp when it encounters moisture.

"The veneer packets are pressed and cut to the dimensions of the final format. For additional stability, the wood panel on the back side is milled out and glued together with a stainless-steel plate. A laser is used to apply the Axor logo to the plate. Then the surface is oiled to protect the material and give it an elegant appearance. The finished plate speaks to the senses of touch and vision: it feels seamlessly smooth and skilfully refined. The wood keeps its natural colour and develops an especially individualised radiance.

On the brand website [www.Axor-design.com/places](http://www.Axor-design.com/places) you can view all the craftsmen stories. Axor. Form follows perfection!

## About Axor

Axor develops, constructs and produces taps, showerheads and accessories for luxurious bathrooms and kitchens to perfection. At the highest aesthetic and technological levels, avantgarde, one-of-a-kind pieces and collections are created. Some of them are considered classics of bathroom design to this day.

Collectively they embody the claim "Form Follows Perfection": not ending the developmental process until nothing more can be added or removed. Pace-setting design objects have been developed with this recipe for more than 20 years with world-renowned designers, among them Philippe Starck, Antonio Citterio, Jean-Marie Massaud and Patricia Urquiola. Axor is a brand of the Hansgrohe Group. ■



# Commercial & Residential Flooring

**C**ommercial flooring solutions include carpets, vinyl and laminates. The function of **retail flooring** is to mitigate impact impairment and sanitation hazards; also to be slip-proof to bolster customer and staff protection, decrease racket and improve audibility, with easy-to-clean coatings to reduce maintenance.

Flooring for **hospitality** needs to be robust for safety and easy maintenance, offer reduced noise, resistance to abrasion and water, and be sanitary. **Restaurant** flooring must offer non-slip, pro-hygiene qualities in high-traffic service areas.

## Corporate / office flooring

ideally should be hard-wearing, fit for purpose and aesthetically pleasing. Other elements to be factored in are no slippage, noise level amelioration and ease of maintenance.

## Commercial vinyl flooring

Commercial applications are well-suited for vinyl applications. Waterproof and easy to clean, vinyl suits high-traffic sites, and looks contemporary and hygienic. Vinyl is ideal for office, store, restaurant or medical practice. The extra expense of quality vinyl is worth the price for hard-wearing high-traffic flooring, and vinyl with a thicker wear layer is ideal for areas where foot traffic walks the same pathway every day.

This layer is not visible to the naked eye and shields the vinyl tile / plank, especially if the flooring finish is homogenous (the vinyl top colour extends to the tile). This is perfect for schools, hospitals corridors and shops, because wear and tear remain invisible and appearance homogenous.

Keep in mind the desired lifespan of the chosen vinyl flooring, as depending on cost and quality, durability lasts from five to 10 years (more or less). Stain and chemical resistant vinyl is the preferred option for high footfall areas.

## Applications for commercial vVinyl flooring

As an alternative to tiles, vinyl absorbs more sound and



Linoleum flooring



Vinyl flooring

offers increased walking comfort and ease of maintenance, resistance to accidents and spills and eye-catching pleasure. For medical spaces, including dental and physician practices, specialised vinyl with infection resistance and bacteria growth inhibition properties are best. Education institutions are idyllic for vinyl flooring in sports grounds,



Hardwood flooring

halls, corridors, classrooms, as well as gym workout areas and change rooms.

## Vinyl flooring maintenance

This requires keeping them dirt and dust-free to reduce dulling, scratching and discolouration – rubber mats at entrances and felt under chair legs will assist with this.

## Residential flooring

The types of residential flooring to consider include timber / hardwood, laminate, vinyl, bamboo, cork, tile (porcelain / ceramic / natural stone) and carpet; each room requires a different material, suitable for its use and look. Here's a look at some examples:

## Timber / Hardwood

A popular choice, wood flooring comes in strips or planks from sources such as oak and maple to cherry and Tasmanian oak, and is sold either finished or unfinished, reclaimed or sustainably grown. Pros include durability, aesthetics and





Cork flooring

ease of maintenance., ideal for bedrooms, halls and living rooms. A cheaper option is engineered wood, which has a top natural wood veneer, with plywood underneath.

### Bamboo

This is eco-friendly, available in solid strips and engineered planks which reveal the grass grain (vertical and end-grain), suitable for bedrooms, hallways and living areas.



Bamboo flooring

### Ceramic Tile

Made from a blend of clay and shale, fired in a kiln, and available in any pattern, ceramics are suitable for entrance ways, kitchens and wet rooms, as well as enclosed patios. These tiles comprise four main types:

- *Glazed* – Comes with a glassy coating and is low-maintenance

- *Porcelain* – Fired at intense temperatures, and either glazed or unglazed, this tile is hard-wearing and stain-resistant, suitable for outdoor areas
- *Quarry Tile* – Unglazed and with a rough, anti-slip consistency
- *Terracotta* – Unglazed and only in earth colours, requires constant sealing

### Laminate

Made with a veneer of a photo under transparent plastic atop layers of compressed fibre and comprising planks / tiles in a floating floor arrangement (the option to install over old flooring without glue / nails. It is scratch-resistant but prone to warping if exposed to water for lengthy periods and suitable for playrooms, foyers and kitchens.

### Vinyl

Flexible underfoot and hard-wearing, made with a PVC layer over a felt layer, vinyl comes in sheet form and click-style tiles, some with a “peel and stick” option. Able to mimic any style of material, it is easy to clean but prone to scratches and has a high ecological footprint, suitable for wet rooms, bathrooms, basements and kitchens.

### Linoleum

Made from renewable resources, it is more sustainable and stiffer than vinyl and has enjoyed a resurgence. Linoleum is also more durable than vinyl and comes in sheet, tile, or laminated plank form. It does dent from exposure to high heels and fades with sunlight, and is suitable for lounges, family rooms and bedrooms.

### Cork

Sustainable and kiln baked, cork comes in tiles or planks material and is soft to walk on. It's also natural looking and slip resistant, but undergoes wear and tear and needs to be resealed yearly with wax or polyurethane. Good for wet rooms and hallways.

### Carpet

Made from soft fibres like wool and nylon, and popular for bedrooms and living areas, carpet is soft underfoot but requires regular cleaning as it is easily stained and may contain allergens such as pollen.

*Each flooring choice, whether for industrial, commercial or residential purposes, is important as it dictates use, ease of installation and maintenance. However, a good choice lasts a lifetime, and minimises fuss and expense.* ■



Carpet flooring



## Kemach Launches Forklift Range

**K**emach has launched their new range of Kemach Forklifts for the South African and sub-Saharan African markets, which will be promoted under their newly formed Kemach Forklifts division.

Speaking at their presentation, held at their offices in Boksburg, Gauteng, Frans van den Heever, General Manager for Kemach Forklifts, said: "We at Kemach are delighted to announce the Kemach Forklift range, in partnership with Anhui Heli, which we believe will complement our existing quality earthmoving products. The Kemach Forklift range offers our customers a South African forklift warranty first - a five years / 12,000hr warranty on the complete machine, not just parts of the machine."

The Kemach range of forklifts have specified Japanese engines, Heli built ZF transmissions and robotically manufactured chassis, ensuring premium brand quality at very competitive pricing. "The range comprises from a walk-behind powered pallet jack up to 45-ton container handling units, enabling us to compete in all sectors of the market. Kemach has a national footprint of 11 branches and eight times sub-dealers across South Africa, giving us the biggest footprint in the materials handling industry when it comes to service-ability and guaranteeing uptime for our customers," said van den Heever.

The construction industry contributes 4% of the South African GDP and the forklift industry taps into more than 80% of the markets that form the GDP of South Africa, so we are confident and optimistic about our ability to successfully penetrate the materials handling markets, explained van den Heever.

The supplier agreement between Kemach Forklift and Anhui Heli was formed in January 2020. Anhui Heli is the biggest forklift manufacturer in China and complies with all European standards as well as being ISO approved.

### Local input

The forklifts will offer customers the lowest cost of ownership over the lifetime of the machine due to its reliability and competitive pricing. Local support features include aftermarket suppliers for battery and charger supplies, forklift attachments and management systems. Driver training and monitoring through Kemach's forklift management system is also available.

Stock forklift machines can be delivered within two weeks, while non-stock machines can be delivered from the factory within 10 to 12 weeks. Kemach Forklift has a large local stock holding at their off-site stock yard.

### The Kemach promise: Solutions not just machines

"We believe Kemach Forklift is about offering solutions, not just selling machines - whether that be from charging stations to full battery bays or load handling to facility layouts. We will work with our customers to assess their requirements and subsequently recommend the best machine for the application - if you need to move an object, we will offer you the most cost-effective way to do it!" commented van den Heever.

The vision for the Kemach forklift business is to supply a world class machine to the materials handling industry, serviced and maintained by a world class facility like Kemach. The mission for the Kemach forklift business is to be one of the industry leaders by 2025. ■

## Refurbish Old Concrete Surfaces With Texture Top®

Texture Top® offers the ultimate decorative solution to save money and time by refurbishing old concrete surfaces.

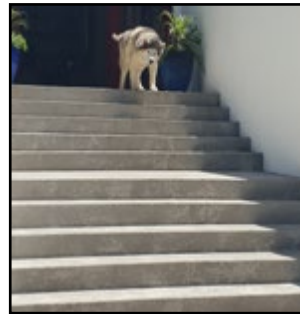
Ageing, worn or surface damaged concrete no longer has to be demolished and recast at a cost to the customer and the environment. Instead, Texture Top®, a CHRYSO Southern Africa product, can be used to enhance existing surfaces through renovation and repair.

Texture Top® is a polymer-modified cementitious coating which could be applied either with a spray gun or trowel to obtain a specified finish. The spray technique allows coverage of large surfaces in a short time.

At an application thickness of merely 2mm, this thin anti-slip coating offers excellent mechanical resistance. The product is available in a standard range of colours, and could be custom pigmented to complement various finishes.

Texture Top® can be applied to achieve any textured or smooth finish. This is a simple and durable solution to renovate and add aesthetic value to surfaces around swimming pools, paths, terraces, driveways, patios, floors and stairs, as well as interior and exterior walls.

CHRYSO Southern Africa's technical and sales teams provide leading edge expertise in support of Texture Top® which makes it easy to achieve customised modern and trendy decorative finishes in a cost-effective and environmentally responsible way. ■



For spray applications, typically using a spray hopper gun, you may need to add additional CHRYSO® Polymer 21 to the CHRYSO® Texture Top powder to obtain the required consistency



CHRYSO® Texture Top surfaces must be coated with an appropriate sealer, typically CHRYSO® FiniSol Brut or Perle



CHRYSO®Deco Wash Pico is a surface retarder that can be sprayed to lightly retard concrete surface setting, to get the finished look obtained with a "sanded" or "acid washed" aspect – like around pools



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## Ctrack Launches On-The-Road Solution

Ctrack by Inseego, the global supplier of vehicle tracking, insurance telematics and fleet management solutions, is introducing the new "On The Road" (OTR) driver fleet management solution.

Utilising the robust and modern Garmin Fleet 790 device as the hardware and the proprietary Ctrack fleet management software, customers are now faced with even more features to ensure the productive running of their fleets and drivers.

The IP67-rated device is a fleet telematics tablet with modem and integrated dash cam. The device is a high-quality, purpose-built out of the box solution equipped with best-in-class hardware, and was chosen by Ctrack due to its innate functionality.

It features a 7-inch capacitive multi-touch display (1024x600 pixels) with embedded 4G modem and open-SIM cellular connectivity. The Android device is fully customisable and comes with always on internet connectivity, wifi, Bluetooth and Nearfield Communication Capability.

The unit is provided with a powered magnetic mount with mini USB and USB Type A connections. Onboard maps are provided with free lifetime updates. The device is tough and optimised specifically for long-haul commercial truck use. Its convenient, easy-to-use magnetic mount makes it easy to remove and use outside a truck or van.

With this OTR solution, it is possible for Ctrack to provide users with a virtual driver ID. Companies can set up virtual driver identification numbers which are required when a vehicle's ignition is turned on. The virtual pin is configured on Ctrack software and identifies the driver of the specific asset to allow driving behaviour and driving habit tracking. Fleet managers can then take action to ensure driver and asset productivity.

When used in combination with Ctrack's NX35 hardware, the device can facilitate two-way voice communication with drivers. This requires that the Ctrack sim card be voice-activated. Drivers can then be contacted directly through the device, either by voice or by text message.

The new OTR solution comes with a hands-free voice kit. An auto answer function can be configured, which is ideal for when drivers are already out on the road. Outgoing calls can be limited to predefined numbers to restrict unauthorised/private calling and the duration of single outgoing calls can also be set. A built-in safety feature stops all device interaction when vehicle speeds exceed 15km/h.

The OTR solution records driving events as the vehicle is moving. Data is stored locally on a SD card within the device. Up to 72 hours worth of driving data can be saved to the SD card, depending on storage capacity.

Three minutes of driving footage are automatically saved when an incident such as harsh braking occurs. A minute is captured before, during and after such an event occurs.

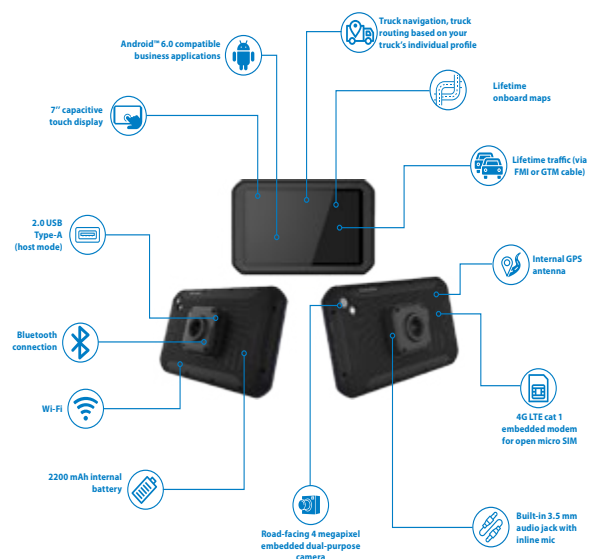
These events are stored on the device's onboard memory to avoid being overwritten.

Tasks or jobs can be sent to the OTR device for drivers to accept and then be navigated to. Job progress can be seen by management in real-time. A driver behaviour interface provides driving statistics to drivers on their driving behaviour.

Drivers can change their status on the device should they have completed tasks, or are otherwise temporarily unavailable. These statuses are pre-configured by Ctrack so drivers do not have to type them. Operations staff can see these status updates and decide whether or not to send further driving tasks to said drivers.

It is also possible to create custom forms on the device such as pre-inspection sheets, and it also allows drivers to take photographs of damage to vehicles. Furthermore, drivers can also capture fuel fill ups at service stations and capture their vehicle's odometer readings. All this data can then be uploaded to the cloud-based system for further analysis by fleet operators.

With the new OTR fleet management system from Ctrack, drivers and assets are now more productive, and "Always Visible".



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Residents at Princess Plots in Roodepoort enjoy their homes constructed from Corobrik's Fynbos Geel and Fynbos Rooi clay face bricks

## Corobrik's Face Bricks Used To Create Homes In Roodepoort's Princess Plots Informal Settlement

The first phase of the Princess Plots Informal Settlement Upgrade Project has seen 281 homes handed over to residents in this Roodepoort-based settlement, with the construction incorporating Corobrik's dynamic Fynbos Geel and Fynbos Rooi clay face bricks. The project, which got underway in 2014, will eventually include 3 500 units within the mixed-density and mixed-land use, replacing informal shack dwellings and empowering residents with homes.

"When it comes to building homes, Corobrik understands that this is more than just a place to sleep and store one's belongings," explained Musa Shangase, Corobrik's Commercial Director. "A home is an extension of the individual and a reflection of their place within society, which is why quality products, such as the Corobrik's face brick range, are so important."

Corobrik's fired clay face brick is robust and extremely durable which means it will not require refurbishment and replacement at a later stage. The colourfast properties of clay mitigate the need for plastering and painting, making face brick one of the biggest cost-savers for long-term maintenance.

Michael Hart of Michael Hart Architects & Urban Designers, the company tasked with the project design, explained that the two face brick colours were chosen to create a subtle variety of natural tones: "The face bricks facades were contracts with vertical plastered panels, painted in a bright but limited palette of colours. Using Corobrik's face brick in load-bearing structures is a huge benefit due to the high compressive strength and durability."

Hart explained that the low-maintenance face brick option used for the majority of the external walling will serve the community in the long term: "The face finish of the bricks was excellent value for money and provides a maintenance-free facade. The clay face bricks also

achieved a very high rating of insulation required for external walling."

The project involves several stakeholders, including the Community of Princess Plots Informal Settlement; the provincial Department of Human Settlements; and the City of Johannesburg. It forms part of government's national policy to eradicate informal settlements and provide housing and dignity to all residents.

The Princess Plots Project will be implemented in six phases with the first phase the Show Village Development. This consists of 281 Reconstruction and Development Programme (RDP) units, each 40m<sup>2</sup> in size. These two-bedroom apartments are located within four-storey blocks, found alongside a multi-purpose recreation centre and a variation of well-defined green courtyards. Security has been provided with the project surrounded by secure perimeter fencing as well as entrance gates and a guard house on site. Princess Plots is strategically located near economic opportunities and transport nodes, making access to school, work and retail centres convenient for residents.

### About Corobrik (Pty) Limited

Corobrik (Pty) Limited was established in Durban in 1902. Corobrik has grown to be the leading brick manufacturer, distributor and marketer of clay bricks, clay pavers and associated allied building products in South Africa. Corobrik achieved this by using expertise gained over more than 117 years in the brick business, superior technology, manufacturing practices, distribution network and logistic capabilities.

Corobrik's head office is in Durban, with regional offices in Durban, Johannesburg and Stellenbosch (Cape Town), and Corobrik centres located in major cities country-wide. Corobrik currently operates 13 factories, which together with Corobrik's alliance partners, permits the company to offer to its valued customers a complete spectrum of brick and paver options. ■



## Paving The Way With Permeable Rural Roads

In a bid to create surfaces that are more permeable and allow for a more natural absorption of water and pollutants, permeable interlocking concrete pavers (PICP) are becoming increasingly popular.

PICPs have interlocking shapes, notched corners, or enlarged joints between PICPs that provide enough permeability to significantly reduce stormwater runoff from roads, parking lots and walkways, provided that the openings are filled with aggregate mixes permeable to water.

Terracrete, a PICP developed by Terraforce in 1999, is ideally suitable for this purpose, as it is a paving block with larger openings (40% open), compared to paving blocks with widened joints (15% open). Says Holger Rust, Founder and Member of Terraforce: "The bigger openings allow for coarse infill to be used which means better infiltration and easier maintenance. In addition, something that is often neglected, this allows tree roots to breathe, to absorb water and nutrients that get washed off the paved areas."

Because they are designed with enough strength and adequate stiffness, Terracrete pavers are capable of accommodating (with suitable sub-base construction) vehicular traffic, making them suitable for the paving of grassed roads and parking areas.

Says Rust: "From an aesthetic point of view, they are very versatile. A grass driveway, a rustic gravel driveway, or an attractive pattern of Terracrete pavers can add the finishing touch to a custom home looking to stand out. With a grass finish, they can add a park-like or pastoral feel to areas normally needing hard paving."

In some African countries, the construction industry is also starting to respond to an increased need to prevent the loss of topsoil and improve water absorption in urban or rural settings, especially considering a predicted drier future across the continent.

In Eswatini, Michael Toepfer, EFS Construction, Terraforce Licensed Manufacturer, wanted to showcase and test the effectiveness of Terracrete permeable hard lawn pavers for the above purposes by installing a test strip on a rural road on his and a neighbour's property.

Says Toepfer: "The blocks (25 Mpa concrete mix, machine made) were installed June 2019 – in situ – as strips the width of car tires, with picks and shovels and some local labour. A little river sand was put down first to level out the surface before the block were laid into the earth in an attractive circular pattern. Finally, the blocks were filled with loose stones found on site, to maintain permeability over time.

"In one place – where a driveway joins the road – the strip was extended over the entire width of the road – 7m long and 4,2m wide, with additional widening on the far side, to add extra stability and access and also to provide space for cars needing to pass each other."

Toepfer completed and progressed the strips in stages over the next few months, testing how each stage would cope with regular traffic of approximately 50 vehicles per day,





ranging from regular passenger cars to tractors, front end loaders and pick-up trucks weighing no more than a total weight of 12 tons.

In August 2019, he added some shaping and planting to the wider section of the road. "The goal was to mimic how nature would deal with stormwater runoff, guiding the water into the grassed areas, while the blocks provide the erosion control required. On the outer side of the fully paved section, I added a simple runoff channel with the Terracrete blocks, one section composted, then grassed, with a grass verge above, and one with the blocks filled with in situ stones and rock riprap above.

"Finally, I progressively added additional grass verges to either sides of the strips with compost and grass. In March 2020, the strips and any wider sections added for extra stability were fully surrounded by kikuyu grass," he said.

Toepfer is happy to report that over 10 months the test strip has performed extremely well: "After heavy rainfall (15mm per hour) the rest of the road was heavily eroded and washed out, while the test section was still in perfect nick. The section with the grass verges performs the best, in my opinion, as they really absorb any excess water that is not able to pass through the blocks fast enough during very heavy rains.

"Also, over that time, not a single block cracked, and even if it did, it is easy to replace blocks as they break. I would be confident enough to give such a road design a 10-year guarantee."

Over in South Africa, some municipalities have also started employing more green methods of erosion and stormwater management. In 2015 the Roads and

Stormwater Department of the Mossel Bay Municipality, after intense consultations with local residents, set out to make a particularly challenging section of gravel road safe to drive over for passenger vehicles and garbage removal trucks. The section of road, with an incline of up to 17% was particularly difficult to negotiate, even after small rainfall events.

After reviewing several products on the market, Altus Eitner, Streets & Stormwater / Project Planning & Management, Mossel Bay Municipality, chose the 350 x 350 x 90mm permeable paver Terracrete, manufactured to a 30MPa crushing strength by Mobicast Concrete Products, licensed Terraforce manufacturer, Southern Cape.

Says Eitner: "Thanks to large holes and a unique interlock the blocks are fully permeable and plantable, which adds to their ability to fully integrate with any environment they are introduced to. The roots of the plants anchor the blocks and help to strengthen them, especially against floods. The holes also allow worms and bugs to pass through the block without sterilising (smothering) the area.

"Another beneficial aspect of the units is their size. The blocks are larger, wider and thicker than normal paving, i.e. firmer and can spread the load better. Added to this, maintenance of the installations is easy, as the blocks provide a stable platform for the mowing of the grass if needed, and if the block strength is increased to 30 Mpa then it works for low volume roads, as was implemented at Stasielok Weg Road with approx. 17% gradient."

Installation proved relatively simple. Initially the damaged section of road was graded to a uniform profile, with the required cross fall into the side drainage channels. Next a 2,8m wide by 100mm deep strip was cut into the length of the road with a grader. This in situ bed was compacted with a 10-ton vibrating roller – using added water where necessary – to create a uniform, smooth working surface, compacted to 92% MOD AASHTO. Then the Terracrete units were laid on the prepared surface bed, and, for extra lateral stability, wired together with 3.1 galvanised fencing wire, as directed by Eitner.

At specified intervals, 900mm long galvanised Y-standards were driven into the ground and connected to the wiring of the blocks. Finally, the block voids were filled with 2% cement stabilised soil from the stockpile, while the voids with the 900mm anchors were filled with concrete. The road has been in extensive use for the past five years to the entire satisfaction of the Municipality and the local Ratepayers Association. ■





## Building The Community From The Ground Up

It is imperative to the growth of the South African economy, and our social responsibility, that big businesses support small businesses within the construction industry, and give back to the community. This is according to Pherdy le Roux, MD at the Gauteng branch of GVK-Siya Zama, a leading construction company that recently worked with local small, medium and micro enterprises (SMMEs) on a local community-work-based project, Paterson Park, located in Orange Grove, Johannesburg.

Paterson Park, aimed at bringing a diverse and stimulating recreational facility to the community, seeks to provide a safe space that facilitates the development of fundamental skills like reading and writing in conjunction with sport, physical activity and health to stimulate growth and development in the community.

“More than 50% of the work, from ground up, was allocated by GVK-Siya Zama to over 10 different community-owned SMMEs in and around the area. This exceeded the contract requirement of a 30% local contractor spend and cements GVK-Siya Zama’s commitment to the development of communities.”

As each SMME was appointed and commenced with their respective trades on the project, management training for the directors of each company was provided. These workshops included management of construction resources, the application of quality principles on a site, contract documentation, and the implementation of site administration and procedures. Once the course was completed, each participant received an accreditation certificate.

GVK-Siya Zama also provided a full-time coordinator as part of the mentorship programme. The training programme ensured that every appointed local subcontractor was set on the road to success and was given the necessary



Pherdy le Roux, MD at Gauteng branch of GVK-Siya Zama

skills and training to ensure that they could successfully complete works on site.

Along with this, 35 local employees received training during over a period of seven months in specialised skills





such as plumbing, bricklaying, plastering and paving. Each of these trainees received accreditation certificates which now enables them to continue working in the industry.

While the Paterson Park project first and foremost allowed people to have input into the development of their own community, it also uplifted the community through job creation and income generation for community-based companies. The Paterson Park project is indicative of the success GVK-Siya Zama has achieved working with local communities. It also highlights the benefit of industry leading processes and training initiatives provided by the contractor.

Le Roux further explains that the project offers long term benefits to the community with the creation of a variety of facilities, including:

**Learning and creativity:** The park targets academic growth by providing a state-of-the-art library, a craft centre to facilitate artistic expression and growth, and an amphitheatre for community organised shows, presentations and recitals. It includes an administrative building, security house and generator to ensure optimal functionality at all times.

**Sporting:** Paterson Park is equipped with an Olympic-style swimming pool and splash pool with a grandstand for spectators. Another grandstand graces a full-size soccer field, while there are two smaller five-a-side fields, as well as two tennis courts, a multi court and a basketball court, with a pavilion. To top it off, the park offers an enclosed multi-function sports hall with a fully equipped gym. While specific titles have been given to these facilities, they all act as multi-use platforms.

“All members of the community, from the public to clubs and schools, will have open access to Paterson Park. GVK-Siya Zama believes that the vested community journey from construction to end use will play a huge role in uplifting the community,” le Roux concludes.

Le Roux gives *SA Builder* his take on the future of emerging contractors in the SA construction industry:

- Small and medium-sized (SMME) contractors have the platforms to step up to contribute more to the sector. These SMMEs are the future of the industry and GVK – Siya Zama has developed SMME models to cater for this need.
- SMME development in the construction sector is important for main contractors for B-BBEE responsibilities, but also to help grow the construction industry.
- The larger construction businesses have restructured their business and don't carry out many trades directly anymore and look for SMME contractors to fulfil these functions.
- Construction sector SMMEs typically specialise in focussing on earthworks, brickwork, plasterwork, concrete work, steel work, for example.
- The SMME that work for us can reach up to R50 million and employ 100 - 200 people.
- The SMME are generally more flexible in their approach to pricing, scope of work and willingness to employ local workers.
- This creates an environment that the main contractors have a real desire to subcontract the trades mentioned above to SMMEs.
- For SMMEs to be successful they must be able to deliver on time and budget, prove they have the skills and qualifications to complete the project, and comply with labour laws and other legislation.
- We have construction incubator programmes running through this business to upskill the SMMEs. The training ensures standards are met and that the SMMEs are set up for success. We sponsor this training. Over the incubation period, the SMMEs also receive training in basic business skills.
- The benefits for all players are significant: the country's skills pool grows, the SMMEs gain skills and jobs, and the contractor can access a pool of trained and certified skills to deliver on its contracts.
- Big opportunities for young entrepreneurs in construction.
- While it's unfortunate that certain of the old school larger subcontractors are closing down, this creates opportunities for SMEs in both the public and private sectors. ■



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people



Peter Gent, , Non-Executive Director of Heartwood Properties Board of Directors

**Peter Gent, ex-RMB COO, joins Heartwood Properties**

Peter Gent, ex-RMB Chief Operating Officer, has been appointed as an independent, non-executive director to the board of directors of commercial property development company, Heartwood Properties, which is listed on the 4AX (4 Africa Exchange). He will also serve as a member of the audit and risk committee, and investment committee.

Gent is currently an independent management consultant whose clients have included the FirstRand Empowerment Foundation, AEE Power Ventures and the Columba Leadership Trust. His time at Rand Merchant Bank saw him filling other positions such as Head of Project, Structured Trade and Commodity Finance and Head of Project and Infrastructure Finance. Mr Gent was also a director in the Corporate and Investment Banking Group for First National Bank. He is currently a non-executive director of FNB Zambia where he chairs the Remuneration Sub-committee and sits on the Risk Sub-committee of the Board.

Says Heartwood Properties CEO, John Whall: "We are very excited that Peter has joined our Board. His extensive background in business and banking makes him invaluable and we welcome his insights. Having previously sat on Audit committees, he also brings with him a considerable amount of experience in risk management, which is much needed in our industry. We are eager to learn from him and take Heartwood Properties to the next level."

Another noteworthy appointment is that of non-executive director, Andrew Utterson, who has accepted a full-time position at Heartwood Properties to head up the strategy of co-working spaces and to drive the development of new opportunities within this space. He was previously CEO of The Business Centre Group, which he co-founded in 2005, with co-working office sites across South Africa. There he held the position of CEO until 2017 when the company was sold to the world's largest co-working operator.

# Construction Industry Events 2020

Due to ongoing restrictions on public gatherings, some of the events on the list may be affected.



Master Builders Eastern Cape Cocktail Event - Postponed



Master Builders Eastern Cape Annual Dinner – 09 July 2020 – Grahamstown - Postponed



ACHASM 2020 Construction Health and Safety (H&S) Summit -6 - 7 October 2020, Altron Conference Centre, Midrand



African Smart Cities Summit - TBA - Gallagher Convention Centre, Johannesburg



Interbuild Africa - 29 Jul-01 August 2020 – Nasrec Expo Centre Johannesburg - tba



AfriBuild - 13-15 October 2020 – Nasrec Expo Centre Johannesburg



African Construction and Totally Concrete Expo - TBA - Gallagher Convention Centre, Johannesburg



Master Builders Eastern Cape Annual Dinner – 06 August 2020 – East London - Postponed



CONEXPO AFRICA - 13-16 October 2021 - Gallagher Convention Centre, Johannesburg



Master Builders Eastern Cape Annual Dinner – Postponed



Western Cape Property Development Forum Annual Conference – 20-21 August 2020 – Cape Town International Convention Centre - TBA



Africa Build Show 2020 - TBA, Accra, Ghana



Master Builders South Africa Congress 2020 – 11 September, Zimbali, Durban



Master Builders Eastern Cape Cocktail Event – Postponed



Sustainability Week - 23-25 June 2020 - CSIR International Convention Centre, Pretoria -TBA



Cape Construction Expo - 09-10 September 2020 - Sun Exhibits, GrandWest, Cape Town



NIGERIA BUILD Expo - 25-27 June 2020 - Landmark Centre, Lagos, Nigeria - TBA



Master Builders Eastern Cape Annual Dinner – 17 September 2020 – Port Elizabeth - Postponed

Master Builders Eastern Cape Annual Dinner – 22 October 2020 – Southern Cape



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- Protector prevents cut pieces from flying off
- Built-in LED light illuminates the work area



Cutting Speed

about  
**2.8** seconds  
Cut 16mm Rebar

Work volume on a single  
full battery charge

about  
**230** cuts  
Cut 16mm Rebar  
with BL1850B

Cutting  
capacity range  
for standard  
rebar  
**3 – 16mm**



**Batteries and Charger Sold Separately.**

For more info contact your nearest Makita dealer:  
JHB: 011 878-2600 • CT: 021 932-0568 • DBN: 031 717-6400

[www.makita.co.za](http://www.makita.co.za)

