

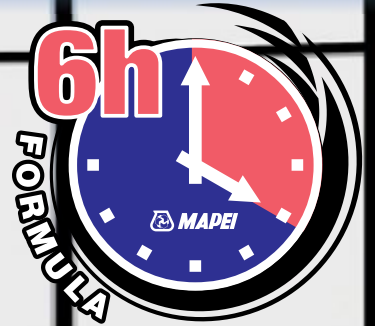


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FROM THE DESK *of the president*



John Matthews
President, Master Builders South
Africa

THE CURATE'S EGG

An old cartoon in the British satirical magazine, Punch, of 9 November 1895, quite neatly reflects the position in which we find ourselves here in June 2020.

In the caption to the cartoon of a priest and his assistant, a curate, eating breakfast, the priest points out regretfully that his colleague's egg is bad. The timid curate, unwilling to complain, assures his boss that in fact, parts of the egg are excellent.

That's more or less how many of us feel about events that have played out over the past weeks, where the good egg we have all been lobbying for - the essential re-opening of our industry - could be said to be mostly good, in line with our best efforts and expectations. However, some problems that come with it might be a challenge for even the most optimistic curate.

In spite of the difficulties of operating in the midst of the pandemic, and all the restraints and care and cost to avoid infection, we have reason to be cautiously optimistic. After all, tough as it's going to be, now that we're out of lockdown, we do at least have a fighting chance of eventually getting back on track. Not forgetting of course that things in our industry were pretty dire prior to Covid-19, and just getting back there, is going to take a long time.

While our efforts in the Construction Covid-19 Rapid Response Task Team - which comprises Master Builders South Africa with some 33 other industry bodies and stakeholders - have been exhaustive in fighting for a re-opening, we must also

acknowledge Mr Ebrahim Patel, Minister of Trade, Industry and Competition and Ms Patricia de Lille, Minister of Public Works and Infrastructure, for engaging with the industry in respect of lockdown, and exploring ways to boost the construction sector and the economy as a matter of urgency.

Although you are all aware of what it has achieved, it's worth emphasising the phenomenal cooperation exemplified in the CC19RRTT, a voluntary body consisting of a wide range of professional and industry representatives working in the development, built environment, and construction sectors. I pay tribute to all those who have given their time and energy to the task team effort to present practical interventions for the rapid reactivation of construction sites and for identifying the government processes needed to support the development and construction sectors. The CC19RRTT is deeply committed to working with all relevant role-players to turn the industry around.

We only just begun to assess and repair the aftermath of the lockdown and the many previous months of enormous damage to our industry. The way forward is heavily influenced by the course of the untameable virus that is ravaging the world, and it's going to be our determination not to be beaten that will eventually help us to succeed.

It's best for us to remember that this is not the first, nor the last disaster that humankind has had to face, but somehow we survive. ■





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SOUTH AFRICAN BUILDER®

The official journal of Master Builders South Africa

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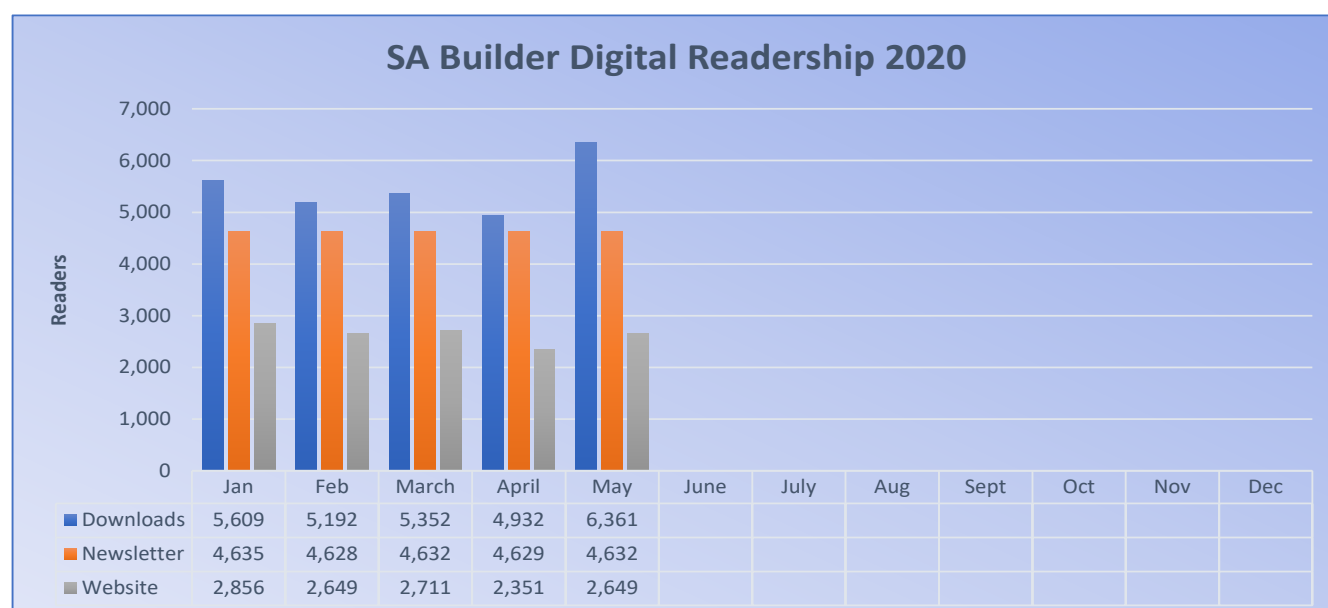
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A Brief Reflection

So it was back to work for most of our Industry from 1 June 2020, but as you are no doubt aware, the MBA has been anything but idle during lockdown. Apart from our usual weekly MBA Bulletins and articles, we have sent out over 40 Covid-19 specific emails which have also been communicated to members and the industry via our [website](#), Facebook, Twitter and LinkedIn.

As mentioned in many of these communications, the MBA was able to positively influence the content and timing of the moves to Level 4 and Level 3 of the lockdown through its participation in the Covid-19 Rapid Responses Task Team (CC19RRTT), a "vehicle" formed by Master Builders South Africa to collectively interact directly with Government and related bodies on Covid-19 issues. We acknowledge and thank Master Builders South Africa, as well as Master Builders KZN, for the key roles they have played in facilitating this process thus far.

We have also been in communication with our Provincial Governments, as well as around a dozen local municipalities in our region in order to promote Master Builders and to influence and assist decisions at a grassroots level. We were thus pleased to have our whole industry move to Level 3 from 1 June 2020 which we are sure occurred as a direct result of the unrelenting and sustained communication and submissions to Government by MBA representatives from across the country via the task team.

Our MBA staff remain fully operational according to our own **Covid-19 Return to Work Plan**. Whilst most of our staff have been working from home, some have already been operating from our PE Office for a few weeks now and the balance will be returning to the office when allowed and in line with Covid-19 Alert Levels over the coming weeks.

Our offices are still closed to the public, except for meetings by appointment; however, we continue to serve our members and keep them up to date on developments. As also mentioned by the President, it is vital that we all comply with the strictest Health & Safety Guidelines and ensure that we keep our sites safe and open. In order to do this, we need to be especially diligent in our planning and preparation before and as we return to work.

What do I need to do?

With all active sites having started up again just a few weeks ago, we continue to provide the best support and assistance to our members as work resumes. To this end we have made numerous documents available on our MBA [website](#) to assist and advise members on what is required to ensure the safety of their employees.

We have fully recognised the *extreme hardship* being faced by many of our members who have been unable to operate at all during this extended lockdown. As a non-profit organisation, we have also taken a bit of a beating as we are also highly dependent on cashflow and have not been able to provide many of our services during lockdown.



Greg Steele, Executive Director
Master Builders, East Cape MBA

There has been such a focus on Covid-19 of late and for good reason, but we must now urgently get back to some of the more pressing issues facing our industry, including things like:

- Non-payment (especially subcontractors)
- Onerous contract conditions
- Waiver of Lien requests
- Payment guarantees
- Skills development
- Promoting MBA members to clients

We would like to thank all members who have already been able to promptly settle their annual MBA membership subscriptions but also recognise that this may not be possible for all members. We have therefore made provision for a number of possible *relief options* to assist members who find themselves in difficulty and cannot pay their subscriptions. We encourage member companies to contact the association and we will gladly assist you as best we can.

Greg Steele
Executive Director
East Cape Master Builders Association. ■

East Cape MBA Bulletin

Wage Increase - Southern Cape Area

The MBA recognises the serious impact that the Covid-19 lockdown has had on the local Building Industry. Some employers were able to recommence on 1 May 2020 under Level 4 whereas the majority of employers were only permitted to re-open on 1 June 2020 under Level 3.

Our Southern Cape Executive Committee have taken this into account and their recommendations for this year's wage increases will be published soon - watch this space!

Builder's Lien

A recent question from a member revolved around a bank requesting the contractor to waive their Builder's Lien (where the client's finance is subject to a mortgage bond). What is a Builder's Lien? It is a common law right which the Builder has to retain possession of the site until in order to secure performance (payment) [our wording].

Our standard answer is always that a contractor should only waive his lien if a Payment Guarantee is provided by the client / bank. We are currently in discussion with the Banking Council on this as well as other contractual matters and will keep you posted.

NHBRC

We have recently also had concerns raised regarding the renewal process of the NHBRC Home Builder registration and are engaging with them on this matter.

BIBC Contributions (NB)

Many employers are making contributions to the various Pension/Provident, Holiday, Medical Aid and Sick/ Benefit Funds managed by the Bargaining Councils (BIBC's) under the watchful eye of the MBA representatives.

The BIBC recently published an important Memo to all contribution employers. Many of the insured benefits such as death & disability cover, funeral benefits, medical aid and sick benefits are subject to keeping up the different contributions and could LAPSE if not adhered to. We are aware that many employers may not have contributions during lockdown and therefore urge you to take careful note of the criteria and ensure that your employees remain in benefit. It may only mean a single contribution or two to ensure that an individual family is not left destitute in the



Neels Heunis, East Cape MBA President, (at the PE MBA Awards Dinner last year)

event of an illness or loss.

Workplace Skills Plans (WSPs)

Our training team submitted WSP's on behalf of 96 member companies last month. These companies will all be receiving their Mandatory Grant refunds from CETA in due course.

Please contact Alec in our Training Department for more information on how we can assist your company to get a skill levy refund next time around.

Covid-19 Posters

Covid-19 Posters are in stock and are available for order. Please contact Angelique or Diona should you wish to order a set.

Sign A Contract

We must once again stress the importance of entering into and signing written contracts and subcontracts. The MBA has Standard Building Agreements which our members are strongly encouraged to use on every contract. Don't wait until you're in the "dwang" before you realise that you should have signed a contract.

Your clients also expect you, the Master Builder or Contractor/Subcontractor, to apply best practice which in this case rests on the signing of a contract.

Membership Certificates

MBA members are issued with a new MBA Membership Certificate annually. The certificate is proof that they are a member of the association and in good standing. The Certificate has an expiry date on it and will also indicate the Category of the Member, ie Building Contractor, Subcontractor or Associate member. ■

Extracts From “Outlook For The Construction Industry Post-Covid-19”

By David Metelerkamp, Senior Economist, [Industry Insight](#)

Some initial research from Arndt et al 2020 shows construction as one of the worst affected industries in SA regarding the impact of Covid-19 (GDP at factor cost). At the time of this presentation there was inhibitory red tape around going back to work for contractors. There was no standard set of rules; each health and safety officer has a different viewpoint about what is applicable. However, with Lockdown level 3, this has changed for the better

Contractors were struggling to get permits, and it is costly and time-consuming to sanitise each work site; PPE and cleaning is expensive. Projects were postponed and the construction industry was operating at 10% to 15% capacity; there was a need to speed things up. There has been no subsequent infrastructure build programme information following the mention of it in President Ramaphosa's State of the Nation Address.

Forecast scenarios take into account the assumption that Covid-19 peaks in September 2020, that there is no major resurgence later on. Other factors include a major government infrastructure spend slump coupled with extra spend on stimulus measures, with a decrease in tax revenue and lack of demand from the private sector.

Baseline scenario 1 (most likely) – 60% probability
50% capacity until the end of June; 70% capacity until end of October; 100% capacity thereafter. The construction industry contracts by 28,2%.

Scenario 2 (more positive) – 30% probability
80% capacity until end of September; 100% capacity thereafter. The construction industry contracts by 14,5% in 2020. More positive longer run trajectory – maybe we do actually see some stimulus. This is becoming more likely as calls for end to lockdown intensify.

Scenario 3 (more negative) – 55% probability
50% capacity until September; 70% capacity until end of the year; 100% capacity thereafter. The construction industry contracts by 34,3% in 2020. More negative longer run trajectory.

Level 5	Only essential maintenance work on power and water projects Industry effectively shut down
Level 4	Public projects only Roads, water and sanitation, power, schools, hospitals etc
Level 3	All of the above + Commercial building projects
Level 2	All of the above + Private residential projects
Level 1	All construction projects permitted

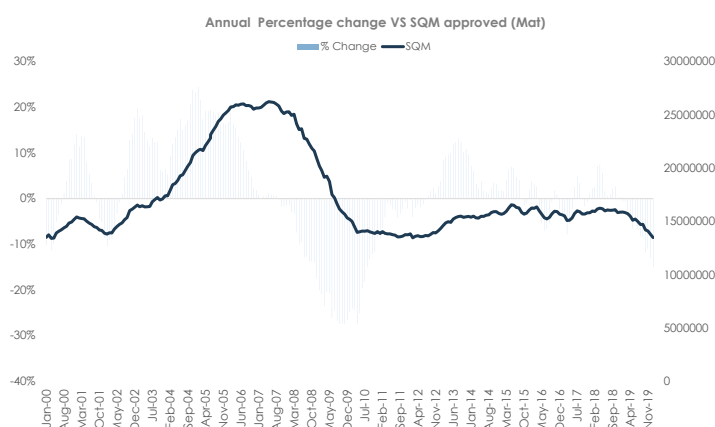
Building (contracted by 28,2% in 2020) vs civil (contracted by 19,0% in 2020) construction have different dynamics and civil construction is dependent on government spend; government can play a counter-cyclical role. We were seeing promising signs of early recovery, pre-Covid-19, at the end of 2019: big road and water projects were coming out to tender. Contractors were becoming more positive around tender activity.

Convergence between civil and building confidence

While civil confidence has been at an all-time low, there has been some recovery in the last two quarters. The opposite has happened to building confidence. Civil engineering confidence bounced back in the first quarter of 2020, more confident about the state of the civil sector: from -100 in the last few quarters to -65 in 2020 Q1.

Fiscal projections	2020/21	2022/23	2023/24
Government income % of GDP	24.5	25.0	25.0
Government spending as % of GDP	41.0	33.0	33.0
Fiscal deficit as % of GDP	-16.5	-8.0	-8.0
Primary deficit as % of GDP	-9.8	-1.8	-1.5
Interest payments as % of revenue	27.2	24.6	26.0
Public sector debt as % of GDP	84.0	88.0	93.0

Source IHS Markit



We did see a cut to the infrastructure budget at the beginning of the year which talks to the counter-cyclical role of government, but the money is mostly still there. R130 billion of the R500 billion stimulus is going to be reprioritised from somewhere. Transport and water infrastructure spend is still expected to grow at above inflation rates after the cuts. Public sector construction was the first to go back and have at least month's head start on building, but could be subject to more red tape / bureaucracy?

However, there remains massive pressure on the fiscus in the medium to long term, with the ratings downgrade, paying back the stimulus loans and the massive slump in tax revenue. The budget deficit is expected to breach 16,5% (from 6,3% last year) and 9,0% is expected. This means less funds are available for infrastructure, significantly dampening the longer-term forecast.

Building outlook

This is private sector-driven and is expected to be hit much harder than civils, affected by a huge demand shock; South Africans are under massive financial pressure. There is no counter-cyclical role here.

South Africans are going to get considerably poorer, with households in the top half of income distribution to see a 25% drop in their incomes. Poorer households already receive most of their income from grants.

Pre-Covid-19, the building industry was already entering a recession. The lowest square metre (SQM) approved over a 12-month period since the mid-1990s was at the end of February 2020. Before Covid-19, 13,46 million SQM was

approved until February 2020 and 13,49 million was approved at the worst point after the financial crisis in 2008/09.

The **residential market** will take in excess of 3,5 years to recover (John Loos) and rental deflation this year and next of -3% to -4% is expected. There is indication of a slump in share prices of listed property.

The conundrum is that of end-May, commercial property construction is went back to to work at Level 3, but most activity is in the metropolitan areas.

The demise of the office

Covid-19 is said to hasten the end of the formal office as demand for office space is expected to drop even further in the longer run. The pandemic has provided an opportunity for business to experiment with having their staff work from home, and many people are realising that an office might not be as necessary as before.

Industrial and warehousing is expected to be the worst affected by some because of close links to the manufacturing industry, which can often be seen as the best proxy for GDP growth (or lack thereof in this instance). Online sales in SA are growing during the pandemic but may still be too small to counterbalance.

Shopping centres: many tenants can't pay rent, and have asked for leniency from landlords. With weaker economic fundamentals going forward, demand for goods and services that malls provide will fall significantly. ■





Health & Safety Risks To Consider During Lockdown Level 3

By Gerhard Roets, Construction Health & Safety Manager, MBA North

Hierarchy of Controls

- Elimination: Physically remove the hazard
- Substitution: Replace the hazard
- Engineering Controls: Isolate people from the hazard
- Administrative Controls: Change the way people work
- Personal Protective Equipment: Protect the worker with PPE

HAZARD: Transport to work

RISK

Company transport: Lack of social distancing, transport with ill people, unsanitary vehicle and poor ventilation in vehicles.

IMPACT

Business risk / fatality

CONTROL

The transportation of workers by public transport with limitations on vehicle capacity and stringent hygiene requirements should be followed.

- Where practical, contractors will make use of transport where the safe distance of 1,5m can be maintained
- Employees must be transported in well-ventilated vehicles where possible
- All vehicles must be sanitised prior to use
- All employees entering the vehicle must be wearing cloth face masks

HAZARD: Covid-19 non-awareness

RISK

General non-awareness of the virus can lead to the spreading of the virus.

IMPACT

Fatality

CONTROL

- Covid-19 information, education and communication

- Posters with information on notice boards, changing facilities and meeting areas
- Hand-outs provided on topics
- Toolbox talks on topics
- Training (internal and external); online

HAZARD: Reporting of duty: Access control

RISK

Biometric system can potentially result in the transmission of the virus.

IMPACT

Business risk / Fatality

CONTROL

- Stop all non-essential visitors
- Introduce staggered start and finish times to reduce congestion and contact at all times.
- All persons entering the site will be wearing a face mask
- Monitor site access points to enable social distancing – you may need to change the number of access points, either increase to reduce congestion or decrease to enable monitoring
- Remove or disable entry systems that require skin contact, eg fingerprint scanners or biometric system.

HAZARD: Possible infected person at work

RISK

An infected person in the workplace can potentially spread the virus.

IMPACT

Business risk / Fatality

CONTROL

- Designated manager or OMP (Occupational Medical Practitioner) to be informed should an infection be suspected
- Person to be provided with a mask if not already wearing one
- Person to be removed to quarantine area while

- awaiting transport
- Person to be transported to a testing or treatment facility
- Use of masks and gloves when consulting with the potentially infected person
- The quarantine area to be sanitised after the person was removed using the correct PPE

HAZARD: General hygiene in the workplace

RISK

People are within 1,5m from each other in the workplace.

IMPACT

Business risk / fatality

CONTROL

- Social distancing policy implemented that no person should be closer than 1,5m from each other
- No bodily contact whatsoever allowed in the company
- Employees should limit the use of co-worker's tools and equipment.
- Non-essential physical work that requires close contact between workers should not be carried out.
- Work requiring skin to skin contact should not be carried out

HAZARD: Site meetings and toolbox talks

RISK

Failing to comply with the social distancing policy.

IMPACT

Business risk / fatality

CONTROL

- Social distancing policy implemented that no persons should be closer than 1,5m from each other
- No bodily contact whatsoever allowed in the company
- Supervisor or manager leading meeting to ensure compliance
- Site meeting protocols

HAZARD: Changing facilities and showers

RISK

Contaminated objects and surfaces can transmit the virus.

IMPACT

Business risk / fatality

CONTROL

- Introduce staggered start and finish times in order to reduce congestion and contact at all times
- Introduce enhanced cleaning of all facilities throughout the day and at the end of each day
- Consider increasing the number or size of facilities available on site if possible
- Based on the size of each facility, determine how many people can use it at any one time to maintain a distance of 1.5 metres

- Provide suitable and sufficient rubbish bins in these areas with regular removal and disposal

HAZARD: Canteens and eating arrangements

RISK

Contaminated objects and surfaces can transmit the virus.

IMPACT

Business risk / fatality

CONTROL

- The workforce should also be required to stay on-site once they have entered it and not use local shops
- Dedicated eating areas should be identified on site to reduce food waste and contamination
- Break times should be staggered in order to reduce congestion and contact at all times
- Hand cleaning facilities or hand sanitiser should be available at the entrance of any room where people eat and should be used by workers when entering and leaving the area.
- The workforce should be asked to bring pre-prepared meals and refillable drinking bottles from home

HAZARD: Tool storage areas

RISK

Infected tools and equipment.

IMPACT

Business risk / fatality

CONTROL

- A sufficient stock of hand sanitiser, soap and paper towels must be kept and made available in the storage area
- Storeman to maintain a 1,5m distance from all staff collecting tools; a Perspex panel can be installed to reduce contact
- The store man must sanitise his hands after each "transaction"
- A sanitising station must be at the entrance to the store, employees collecting tools and goods must sanitise prior to entry
- All commonly used tools must be sanitised on being returned to the store

HAZARD: Machine and vehicle keys

RISK

Contaminated machine or vehicle keys that are handed over between employees can result in the transmission of the virus.

IMPACT

Business risk / fatality

CONTROL

- Seventy percent alcohol base sanitiser is available during the issuing and receiving of machine and vehicle keys
- Drivers should remain in their vehicles if the load will allow it and must wash or clean their hands before unloading goods and materials
- Continuous sanitising of hands
- Equipment to be sanitised during refuelling
- All machines have sanitiser in the cabs to sanitise on an ongoing process ■

Extracts From Covid-19 OHS Compliance In The Construction Sector

By Hilton Ganesen –Deputy Director: Construction Specialist, Department of Employment and Labour (DEL)

Introduction

- DMA (Disaster Management Act) –Section 27(2) –DMR (Department of Mineral Resources) -29 April 2020
- DMA –Section 27(2) –DMR -28 May 2020
- Regulation 2 “ ...the addition of Chapter 4 after Chapter 3”
- Aware of High Court Ruling on the DMR, still applicable

DMR April 2020

Chapter 2 Authority to issue Directions
Regulation 4(14)

“All Directions issued in terms of these Regulations shall continue to apply unless, varied, amended or withdrawn by the Cabinet Member responsible for such directions.”

C19 OHS Directive

In addition to DMR the OHS Directive requires:

- Risk Assessment
- Health and Safety Policy
- Covid-19 Manager

Sector Guidelines

RA N/A <10 employees, adhere to Clause 40
RA and H&S Policy must be submitted to DEL for > 500 employees

Sector guideline template

1. Risk assessment
2. Engineering controls
3. Administrative controls
4. Healthy and safe work practices
5. Personal protective equipment
6. Provision of safe transport for employees

Documents / appointments

- Compliance Employee
- Work plan
- Compliance Officer
- Risk assessment
- Health and safety policy
- Covid-19 Manager
- Sector guidelines

Construction lifecycle

- Stage 1 –Project initiation and briefing
- Stage 2 –Concept and feasibility
- Stage 3 –Design development
- Stage 4 –Tender documentation and procurement
- Stage 5 –Construction documentation and management
- Stage 6 –Project close-out

Previous / current / new sites

- If a CWP was issued to the site then a new Annexure 1 application is not required
- New CWP applications must include Covid-19 requirements
- Notification of the construction Annexure 2, already submitted is not required to be re-submitted

Risk assessment

6. Every employer must establish the following administrative measures:

16.1 It must undertake a risk assessment to give effect to the minimum measures required by this Directive taking into account the specific circumstances of the workplace.

Policy

16.2 If the employer employs more than 500 employees, that employer must submit a record of its risk assessment together with a written policy concerning the protection of the health and safety of its employees from Covid-19 as contemplated in Section 7 (1) of OHSA to –
16.2.1. Its health and safety committee established in terms of Section 10 of OHSA; and
6.2.2 The Department of Employment and Labour

Covid-19 requirements

- Client – amend / add an addendum to the baseline RA and SSHSS to incorporate these requirements throughout the site
- Principal contractor – plan should include work plan, RA and appointment(s)
- Contractor – as per PC if applicable
- Every employer = client / PC / contractor unless otherwise agreed upon, many variables
- DEL Workplace Preparedness Plan

High contact activities / areas Activities	Areas
Labour-intensive activities	Toilet facilities
Working below other persons	Changing rooms
Conducting on-site Toolbox Talks	Shower facilities
Handling of tools equipment / materials	Canteen and eating areas
Working in confined spaces	Open-plan workspaces
Working on a suspended platform	Workshops / storage areas
Working on scaffolding <ul style="list-style-type: none"> • Must be controlled • Entry / exit at difference times for employees • Have designated compliance employees • Wash / sanitise • Screening (eg thermometer / questionnaire) • Register with traceable contact details, no sharing of pen, compliance employee to complete or each bring own pen or sanitise 	Common areas within or outside the site

Notes From “Work At Height PPE Equipment – Inspection, Selection and Management”

By Hein Stapleberg, MD, Gravity Access, [Gravity Access](#)

Work at height is a dangerous endeavour and compliance with regulations, best practice standards and equipment specifications are vital. Different countries have their own standardisations, such as CEN, SABS and ISO. These standards govern equipment performance consistency / predictability. The Gravity Group follows CEN standards, which are multinational, performance-orientated and well defined, offering an ecosystem in which European directives govern PPE standards, norms and specifications.

Standards

Although work at height equipment may seem similar, it can differ in price. Examine an item for the EN stamp which indicates standardised CE quality. The devil is in the detail – for example, a helmet is subjected to a barrage of quality tests, including an energy absorption test, a test of chin strap strength, as well as a penetration test. The Camp Ares helmet offers the best of EN 397 and EN 12493 standards and addresses head injury risk.

Marking and traceability

One needs to know the equipment history to manage its failure risk. Each piece of equipment needs to have its unique mark, but these may fade, leaving the tag / serial number unreadable. In this case the onus is on the user to mark it themselves. There is also a need for record keeping for the lifecycle of equipment. Radio-frequency identification (RFID) microchips use electromagnetic fields to automatically identify and track tags attached to equipment.

Risk and quality

Storerooms must be access controlled and the owner is responsible for the management and storage conditions of equipment – dry, clean, ventilated and with no direct heat. On a work site, the user of the equipment is responsible for use and storage. For example, refrain from leaving harnesses lying around – pack them away.

PPE inspections

These are key to prolonging the lifespan of equipment and comprise

1. Pre-use: quick, preventative, performed each time before use
2. Periodic: more formal, preventative, recorded, with guidelines for frequency of inspections (risk-based approach)

3. Interim: performed when exposure to a damage event is suspected or with long-term projects where equipment is kept on site; formal and recorded

The equipment manufacturer dictates the competence of inspection, a matter of drawing up the process and logging it. The inspection involves the inspector's eyes (colour and damage to equipment), nose (smelling pungent chemicals indicates a spill) and hands (feeling equipment viability and function).

PPE lifespan

This involves rigorous testing determine maximum lifespan. The lifespan indicated on the item is not its actual lifespan. Lifespan measurement does not include the length of time the item was stored or unopened. Once opened, it is exposed to wear and tear, so inspection dictates lifespan. Awareness of the conditions in which the item is used is important, eg coastal areas are corrosive to PPE.

If the equipment is suspect, don't use it and rather isolate it and remove it from circulation, as it is often difficult to control or mark as defective. If the equipment has reached its end-of-life then destroy it and update the records.

PPE preparation

Keep your personal kit assembled in-between usage, rather than assembling and re-assembling it. It is important to pre-assemble rescue kits. All equipment is not one-size-fits-all; if generic, re-assemble to check. A large part of work at height incorporates training users of the equipment about the PPE.

Equipment limitation

Breaking strain test (destruction) is indicated, but allow a margin for the safety factor and minimum breaking strength and maximum safe use load. Ensure you know the manufacturer's working load limit (the load applied on a pulley system is twice the amount). Remember that not all makes of equipment are compatible with each other.

Selection

Look at the range of rope diameters and ensure the equipment is compatible. Read test reports and ensure equipment sellers are reputable. ■

Extracts from “Requirements, Planning And Performing Work At Height Rescues”

By Danie Nel, Presenter, Gravity Training, Gravity Access

Legal requirements for rescues in SA

There are different interpretations of the law, so non-specialists often have misunderstandings. SA regulation is per OHS Act 85 of 1993. This Act requires a risk assessment of the work to be carried out from a fall risk position, and the methods used to address these risks *as per location* – specific to the location. In this Act there is no specific height mentioned, so it refers to falls from any height.

All fall risks per location must be factored in, eg fragile work surfaces. A rescue plan from a specific location is needed – the rescue plan applicable for the specific fall risk.

Risks

- Identify
- Assess
- Control
- Monitoring / rescue

If the risk assessment is correct, and followed sufficiently, there will be no need for “Plan B”. However, there is always a chance something could go wrong, so the need for a form of recovery is necessary, but the fall incident shouldn’t happen in the first place.

Risks identified

- Person incapacitated – faints, falls, vertigo, panic attack, all preventing them from getting to an area of safety (fatality risk if they aren’t rescued).
- Fallen person – the position in which they have fallen may be complicated, eg over an edge. The areas from which the fall incident may occur must be covered in the risk assessment / fall risk plan.
- No rescue plan = DANGEROUS – no fall risk pre-emption / prediction – based on non-fall assumption. It is a legal requirement and best practice to have a fall rescue plan.
- Incompetent rescuers – fall technicians must have specific training. There is no “one size fits all” fall rescue technique. Upskill rescuers to perform required rescue.
- Inadequate equipment – not having the correct equipment for task at hand. This will prevent immediate rescue; it is necessary to implement rescue procedure immediately following incident.
- Hence, rescue plans require
 1. Procedure

2. Personnel
3. Equipment

Types of rescues

1. Lowering eg ratchet rescue – casualty above point of safety.
2. Lifting / lowering – point of safety below casualty.
3. Lateral / side to side – more complex, use of stretcher and backup lines, team rescue and more equipment.
4. Combination of above

Planning for rescues

- Area
- Anchor points
- Required rescue
- Required competencies
- Required equipment
- Number of team members

Rigging for rescue – either the rescuer and casualty use the same set of ropes, or they use separate ropes (safer but requires more equipment). Regarding rescues in monopoles / telecommunication towers, these are difficult rescues involving multiple plans and are influenced by the number of people in the monopole. For example, for two people in a monopole, the top person needs a rescue kit in order to rescue the bottom person; or, the top person falls and the bottom person rescues the top, which is more complex procedure.

Work SOP (standard operating procedure) influences rescue SOP – in risky situations, contact a subject matter expert for the correct SOP. A Rope Level 3 technician is required to be on site. If the Level 3 technician is incapacitated, then use a Level 2 technician OR ensure that the Level 3 technician is only allowed on descending equipment.

The **fall protection planner** must designate exclusion zones on work sites. Ensure the anchor points allow for the rescue execution. Companies need:

- A full protection plan developer
- To implement the fall protection plan
- Fall arrest and basic rescue plan
- Advanced fall arrest rescue plan
- Level 2 and 3 rope access technicians



GRAVITY

ELEVATING SOLUTIONS

Safety Bulletin - June 2020

Fall Arrest Rescue Method Comparison

There are many types of fall arrest rescue methods that can be implemented on sites. In this bulletin we will compare the three most common rescue methods

Description of the various rescue methods:

Ratchet Rescue	3:1 Pulley System	Cut-away Rescue
<ul style="list-style-type: none"> The use of a ratchet device to lift the casualty approximately 30cm in order to allow the rescuer to remove the safety system that is under tension and lower the casualty to a safe platform 	<ul style="list-style-type: none"> The use of a 3:1 mechanical advantage pulley system to either lift or lower the casualty the desired height to a safe platform 	<ul style="list-style-type: none"> The suspension of a casualty by using a descending device in order to cut-away the safety system under tension in order to lower the casualty to a safe platform



Review of the different rescue systems:

Criteria	Rating		
	Ratchet Rescue	3:1 Pulley System	Cut away Rescue
Affordability	★★★★☆	★★★★☆	★★★★☆
Simplicity	★★★★☆	★★★☆☆	★★★★☆
Safety factor	★★★★★	★★★★☆	★★★☆☆
Lifting and lowering capability	★★★☆☆	★★★★★	★★★☆☆
Training required	★★★★☆	★★★★★	★★★★☆
Overall rating	★★★★★	★★★★☆	★★★★☆
Gravity Training's recommendation	The ratchet rescue is a tried and tested system. It is very safe as the casualty can't be disconnected from the original equipment if the system was installed incorrectly. It also avoids harmful equipment (like knives) close to ropes. The cut-away rescue carries a higher risk of shockloading, cutting the rope and incorrect installation than the other options.		

For more information on these systems and other solutions, contact info@gravitygh.co.za or visit www.gravitygroupholdings.com.

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Notes from “Gravity Training – Low Level Heights”

By Danie Nel, Presenter, Gravity Training, [Gravity Access](#)

FEM recorded 209 accidents, of which 129 resulted from falling from heights (FFH), which included from ladders, platforms, skylights, manholes and trenches. In SA, the total cost of accidents is 5% of the value of completed construction, and comprises:

- Lost time
- Deadline delays
- Training new employees
- Legal fees
- Medical costs
- Indemnity payments
- Long-term renumeration

Working at height

Construction regulations 1 “Fall risk”

- Any potential exposure to falling either from, off or into – fall risk prescribes the need for a risk assessment. Low level heights are safer
- CR 1.0 (2) (a) – risk assessment of all work carried out from a fall risk position, as well as procedures and methods

Misconceptions

- Minimum height for PPE
- Low level heights are safer
- No training required for low-level work

Risks of work at height

- Individual worker – impact of stress, competence, psychological factors, substance abuse, adherence to risk assessment and culture of safety
- Company’s health and safety management – eg substandard risk assessment
- Inadequate equipment / tools – damaged or uncertified
- Improper use of equipment resulting in
 1. Damage to equipment
 2. Injuries and death – importance of training and supervision
- Unreasonable deadline – pressure, shortcuts
- Access method appropriate and safe
- Environmental conditions – weather and animals

Low-level heights

- Rooftops
- Portable ladders
- Wooden poles
- Billboards
- Mobile elevated work platforms (MEWPs)
- Manholes / trenches

Dangers of low-level heights

- Reduced minimum free space and protection from fall
- Advanced rescue requirements

Practical examples

- Rooftops – large scope of work at height eg antennae
- Fragile surfaces
- Access permits
- Inspections

Portable ladders

- Cause of most accidents
- Type of ladder (eg A-frame); must be stable
- Type of overhead hazard eg fibre / overhead power lines – don’t use ladder made of conductive material
- Length of ladder – can’t extend into power lines

Pole climbing shoes

- These must be strapped to ascend and descend wooden poles
- Need training to use
- With overhead hazards, don’t enter exclusion zone

MEWPs

- Training, inspection and conditions are key factors

Overhead hazards

- More training is needed for powerlines, with particular attention paid to exclusion zones

Complex solutions in rigging comprise a combination of ladders, ropes and lifelines, for which inspection requirements (QSR section 3 9 (a)) can be used. ■

Online Concrete Technology Education Now Offered By TCI

The Concrete Institute's School of Concrete Technology now offers online courses to help members of the construction industry upgrade skills during the Covid-19 lockdown.

John Roxburgh, Senior Lecturer at the School, says the courses are offered via the School's existing online platform, augmented by video conferencing technology to explain important concepts, receive feedback from the candidates, and answer any questions they may have. "We have already most successfully employed this method for SCT30 'Concrete Technology' training recently.

This is an intensive course aimed at civil and structural engineers, experienced technicians and technologists and involved receiving tuition from the online platform and attending some short video meetings for discussions, feedback and supplementary information. All went exceptionally smoothly," he states.

The School of Concrete Technology is now planning to online present SCT10 "Introduction to Concrete", and SCT20 "Concrete Practice", both coupled with video conferencing as the successful SCT30 course. It is also planning to present SCT21 "Concrete Industrial Floors on the Ground" online. "The online training will be offered at special lockdown

discounted tariffs to encourage prospective candidates to use the lockdown to expand their knowledge of concrete technology. The School has over many decades established its reputation as the leading concrete technology training establishment and we now intend continuing to serve our market in a manner more suitable for current – and even future – requirements by adapting as much of our current curriculum as possible for online tuition," Roxburgh adds.

For more information, contact rennishas@theconcreteinstitute.org.za. The School's full 2020 education programme is on www.theconcreteinstitute.org.za. ■



John Roxburgh, Senior Lecturer at The Concrete Institute's School of Concrete Technology

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Q&A With Bheki Mdlalose, Group Managing Director, Grinaker-LTA

What was the background for the acquisition of Grinaker-LTA from Aveng by Laula Consortium?

- Aveng made a strategic decision to exit the South African construction market and focus on mining contracting (Moolmans) and its Australian operations (McConnell Dowell).
- Construction in South Africa employs mostly black African people and thus it made business sense to hand over the business to black entrepreneurs.
- Laula is a consortium made up of three businesspeople, representing investment businesses they are controlling, namely: OTEO Holdings (Mlu Manci - Chairperson), Bruce Zungu (Non-Executive Director), Raymond Cele (Executive Director) and Bhekani Mdlalose (Group Managing Director). The major drive was to be a part of the team that will make a difference in South Africa and contribute to the infrastructure in the country. Contractors build monuments that create legacies and last for a long time.

How is Grinaker-LTA dealing with the coronavirus lockdown?

- This has been the most challenging time for the business and South Africa as a whole. Our message is consistent with that of Government: people should adhere to the lockdown rules and remain at home except for when they require essentials services. If the virus is spread the virus through movement and contact, minimising movement will curb the spread.
- G-LTA's leadership has encouraged employees who do not feel well or were in contact with people who have / had been travelling to get tested.
- Good governance is never more necessary than during a crisis and at a time of significant change. The tough decisions G-LTA leadership has had to take during the crisis and will continue to take in months ahead to ensure that our employees are taken care of and the business is sustainable remains the paramount goal.
- We have extended our hands to the needy communities that we operate within in the form of food parcels, providing water and essential PPE (this is what we call Ubuntu).



Bheki Mdlalose, Group Managing Director, Grinaker-LTA

What are Grinaker-LTA's future plans?

- Grinaker-LTA has a lot to offer to South Africa's troubled construction and infrastructure sector. Having pioneered the construction of monuments, the company possesses the skills and tenacity to accelerate the infrastructure stimulus as set out by the President.
- Our ability to connect and develop meaningful bonds with communities in which we operate will ensure we play a key role in rolling out of infrastructure stimulus.
- We are familiar with rural and underdeveloped communities – this will make it easy for us to deliver projects in environments we understand.
- Our commitment to the economic growth of South Africa will position us to deliver the much-needed infrastructure built in South Africa.
- We are a smaller business now, so we pay more attention to our clients' needs for better returns. We are also able to make decisions quicker, which will minimise unnecessary delays and costly overruns in the projects we are involved with.
- We are looking to get involved through the lifecycle and value-chain of the project development. ■

Trailer-Mounted Equipment Makes High-Pressure Jetting A Breeze

Werner Pumps is renowned for providing 100% locally manufactured jetting and vacuum trucks to South African municipalities and contractors. The company also caters for smaller businesses, with its Werner trailer-mounted drain blasters and ultra-high-pressure cleaners. These units are manufactured locally and offer an ideal solution for cleaning domestic sewer lines, as well as water sandblasting and pressure cleaning.

"We have been manufacturing these trailers for decades, and like all our other equipment we produce, we can tailor them to meet customer needs," says Sebastian Werner, MD at Werner Pumps. "They have historically been one of our most popular products because they are more affordable than a truck, easy to transport and able to get into smaller spaces, making them perfect for servicing residential sewers, small municipal operations, or for other domestic jetting applications."

The drain blaster trailer units come with diesel-driven 600-litre breaker tanks and hydraulic hose reels with 120m hoses, all fitted on high-speed road ordinance trailers. There are models available for every need, ranging from 70 litres per minute to 350 litres per minute, with pressures from 130 Bar to 205 Bar and power from 35kW to 135kW. Extras available include a Werner low water inlet switch,

high-pressure jetting hose (20m, 30m or 50m), a high-pressure gun with lance, nozzle holder and fan nozzle, and the Werner small hose reel for smaller diameter hoses, for cleaning of household lines.

The high-pressure jetting pumps are available in diesel or electric models, and can be skid or trolley-mounted too, depending on the customer's preference. The diesel trailer-mounted unit has a 153kW, engine that operates at 1 000 to 2 200RPM and a 500l water tank. The electric trolley-mounted model has a 110kW, engine that runs on 380V OR 525V, and no tank. Both units have a maximum working pressure of 980 Bar and flow-rate of 54 litres per minute. They have pneumatic pressure regulation with remote control, and are perfect for rubber removal, pipeline cleaning, water sandblasting and pressure washing. ■



Aluminium profiles from Tectra Automation ideal as Covid-19 protection screens

Rexroth aluminium profiles from [Tectra Automation](#) are used to safeguard personnel across a range of industries and numerous applications. The durable composition of these profiles and their adaptability to suit any application makes them ideal to help prevent the transmission of the Covid-19 from air-borne particles. This is done by using the profile and screen as a barrier between customers and shop personnel or between colleagues in a work environment.

As these profiles are assembled with T-slotted joining grooves, and do not require welding, they can be fixed or mobile, U or L-shaped and are not limited to size. The system's modularity and adaptability allow for an easy upgrade from an L-shaped to a U-shaped enclosure in minimal time.

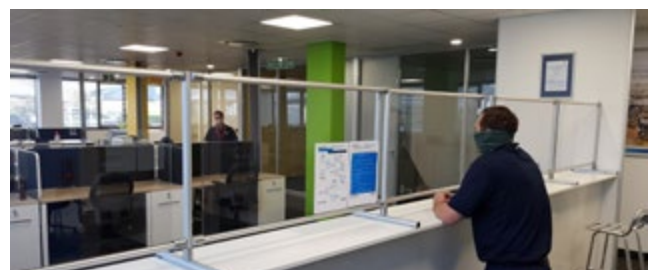
Constructed of acrylic, toughened glass or polycarbonate material, the screens ensure durability and provide a reliable protective barrier to keep people from getting too close. Screens are additionally anodised treated, which creates a high resistance to chemicals that are used to clean and sanitise surfaces. With these features, they are suitable for various settings practicing social distancing.

"The adaptability means it can be used in numerous retail outlets, from pharmacies to grocery stores – practically any place to help provide distance between employees and shoppers," comments Jonathan Narainsamy, Product

Manager at Tectra Automation. "This reduces the risk of transmitting the Coronavirus in work environments or businesses that deal directly with the public."

Tectra Automation, a Bosch Rexroth Company, has more than 30 years' worth of experience with safety guarding, creating technology that is adaptable, durable and reliable.

About Bosch Rexroth South Africa Group of Companies
[The Bosch Rexroth South Africa Group of Companies](#) (previously the Hytec Group) is Africa's largest fluid power and automation company. It comprises eight specialist companies: Bosch Rexroth South Africa (previously Hytec Holdings), Hytec South Africa, Tectra Automation, Hytec Fluid Technology, Hydraulic and Automation Warehouse, Hytec Engineering, Hytec Services Africa and HYSA, which collectively source, market and distribute over 30 international hydraulic, pneumatic and automation brands.



Tectra Automation's protective aluminium profiles

Signage Company Out To “Zap” Covid-19 With New PPE range

Ballito-based Zap Signs has drawn on the skills it uses to produce Perspex, printed vinyl and other types of signage to create an innovative range of Sneeze Guards and decals that will assist retailers selling essential items during the Covid-19 lockdown.

According to company founder, Lyall Berkeley, who runs the business with his brother Kirk, the Covid-19 lockdown created a situation where a small business like Zap Signs could take the cliché “necessity is the mother of invention” to a whole new level.

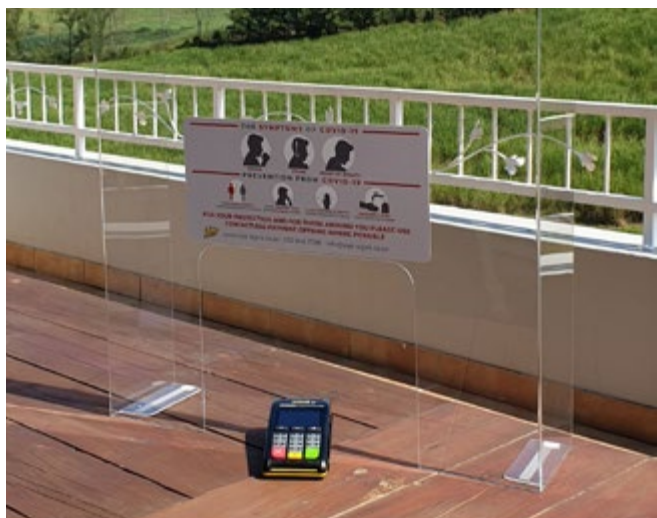
“Zap Signs is proud to offer a complete counter kit for the protection of your company’s most valuable assets - your staff. We have developed a product range not only aimed at encouraging social distancing but also actually providing a protective physical transparent barrier between counter staff and customers,” he explains.

These Perspex Sneeze Guards come in three standard sizes - large (front face 600mm side x 800mm high with 150mm side protection panels), medium (front face 600mm side x 650mm high with 150mm side protection panels) and a desktop screen (front face 700 wide x 450mm high) with 150mm side protection panels.

The screens are supplied with double-sided tape on the base tabs to secure them to counters or desk tops. The medium and large screens also come with a full colour Covid-19 information decal which the client can apply to the screen if they so wish.

The Sneeze Guards, which are 100% designed and manufactured at the company’s factory in Ballito, are just part of a range of products that Zap Signs intends introducing.

The company also produces full colour social distancing floor decals which can assist customers in retail outlets to



Zap Signs Sneeze Guard



Zap Signs Sneeze Guard

ensure that the correct social distancing is maintained. Up until now, many outlets have simply used tape strips on floors which has created a great deal of confusion or has been completely ignored by shoppers.

The floor decals come in three different designs and two sizes (large and medium) and are printed in full colour on non-slip textured floor vinyl with air-release technology to ensure that, when they are applied to a floor, there are no air bubbles underneath. These decals can be customised depending on orders in batches of four.

Zap Signs was started in 2008 by husband and wife team Lyall and Stacey Berkeley to use their creativity and passion for customer service, to provide clients with unique branding solutions that stand out from the crowd.

“We have all the necessary permits and documentation to manufacture and supply PPE equipment during the lockdown. We will now ramp up production of these important items. We have six full-time staff who produce them. These screens will allow us to survive the pandemic. Our main priority at the moment is to do everything we can to remain in a position where we can continue to pay our employees. We are like a small family at Zap Signs and it will be devastating if we had to let anyone go,” he explained.

Berkeley said that he believed that the pandemic might even have assisted the company to develop a whole new range of PPE products that will continue to be marketed post Covid-19 and could ultimately even help grow the business. ■



Soilmec in operation

Gauteng Piling Back In Action After Lockdown

The devastating pandemic lockdown in the construction sector now means that decision-makers will entrust building projects only to companies of repute, says Gauteng Piling founder and MD, Nico Maas.

"The industry has learnt to trust Gauteng Piling so demand for our services has already started to increase and the company is now busy on several sites with sufficient work in the pipeline," says Maas, who established Gauteng Piling in 1996.

He says Gauteng Piling has managed to survive the lockdown, which destroyed many construction industry players, because it has through experience learnt that a "mean and lean" structure is essential for survival in the volatile building industry. "Tight control on spending through rig and plant refurbishment rather than spending on expensive new equipment has kept Gauteng Piling afloat through many a slump. Most of Gauteng Piling's piling rigs are tyre-mounted allowing for quick site establishment.

"The refurbishment policy has proved most successful with our 15 auger rigs performing extremely well. Rebuilding is far less expensive than purchasing new units and this has enabled Gauteng Piling to remain competitive. Piling is a highly-competitive industry, calling for experience and the ability to adapt to change," Maas adds.

The company - a Level 2 B-BBEE contributor - has some impressive high-profile projects to testify to its expertise including, for example, the provision of the foundation for Africa's largest single-phase retail centre, Mall of Africa in Midrand; the expansion of the Fourways Mall; as well as additional and challenging extensions to the Market Theatre complex in Johannesburg.

Among the many current or recent contracts secured are specialised piling projects calling for pipe piling for a new lift at Clearwater Mall in Roodepoort, and the SAPS premises in Welkom; and friction (floating) piles for a new residential complex at Greenstone. Standard auger piling contracts include:

- The new luxury Tree Tops apartment block being developed by Tricolt in Houghton;
- A new entrance and expansion of Cresta Shopping Centre in Randburg;

- New facility for diving rescue training for the University of Johannesburg's Medical Rescue students in Auckland Park;
- Tshwane University of Technology satellite campus in Emalahleni; and
- Storage tanks of Coca-Cola Beverages Africa in Nigel.

Gauteng Piling was also appointed to handle piling for housing projects in Marabastad, HB Realty residential developments in Corlett Drive, and expansion of Africa Floorcare warehouse in Alberton.

For more information, contact Nico Maas on email nicomaas@mweb.co.za or cell 082 651 8182. ■

GAUTENG PILING

Gauteng Piling is a well established piling contractor based in the Gauteng Province of South Africa. Gauteng Piling deal with projects both large and small.

Gauteng Piling has completed over **1600** contracts.

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FRANKI
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Franki Shines At Landmark Longkloof Precinct Project

Franks Africa recently called on its experience to prevail over an array of challenges to deliver a two-level basement with depth of up to 10m at Growthpoint Properties' famed Longkloof Precinct project in Cape Town, on time and within budget.

Specialist geotechnical contractor Franki Africa was recently contracted to deliver a two-level basement for the construction of the Canopy by Hilton Cape Town Longkloof hotel developed by Growthpoint Properties, South Africa's largest real estate investment trust. The 150-guestroom building will be the Canopy by Hilton brand's first property in Africa.

The Canopy by Hilton Cape Town Longkloof is expected to become a South African landmark, which will welcome guests from all over the country and the world. Located right close to Cape Town's historical epicentre, the Gardens Suburb, the project – which forms part of Growthpoint's precinct redevelopment – gives new shine to the 112-year-old heritage site, Longkloof Studios.

Scope of project

Franki Africa's scope of project, explains Contracts Engineer, Daryn Cloete, entailed the construction of a two-level basement with depth up to 10m, as well as relocating services – most notably a 250mm diameter sewer pipe and 1 050mm diameter stormwater pipe, among others. "There was also a façade of a

100-year old heritage building close by that needed to be protected with a steel structure that was supported on piles," says Cloete, adding that there were also items to be salvaged before demolition of the back half of the heritage building could take place.

In a nutshell, the project included rock breaking, façade protection, demolishing of the building, salvage of items, the relocation of services and the construction of the lateral support works. The basement comprised 2 130 m² of lateral support, had 23 corners within it and was surrounded by some notable heritage buildings, which meant that it was not your typical rectangular or square-shaped basement.



Work in progress



Not without challenges

The project had its fair share of challenges. Firstly, Cloete explains that the services had to be relocated in close proximity to a busy road, which made the execution of that particular task challenging. This was exacerbated by having to relocate and deal with live electrical cables in the process.

With the prime Longkloof redevelopment project located right in the middle of a historic urban quarter with existing neighbourhoods, Cloete admits that managing noise and dust pollution from breaking rock was a major challenge.

Below the clayey silt sand – approximately 1,5m below ground level – was the Malmesbury bedrock, which turned out to be slightly weathered to unweathered. A total of 24 000m³ of material was ultimately removed from the site.

Breaking the 70 MPa rock on site also made it difficult to stick to production targets. Despite the raft of challenges, the five-month project – which commenced on 16 August 2019 – was completed on time and within budget.

A big factor contributing to the success of the project, says Cloete, was the way in which the Franki team “juggled” the constant challenges, while keeping their focus on the main task at hand, which was to create enough area for the subcontractor, Ross Demolition, to break and remove rock.

To prevail over these challenges, Cloete says: “We kept tackling the challenges as they arose and continued to push forward as a team. Due to great teamwork of the crew, led by Fikile Tshetsha, the contract was completed well within the stipulated timeframe. A big ‘THANKS’ to DHK Architects, Atvantage Project Managers, MLC Quantity Surveyors and LH Consulting Engineers, whose input and expertise contributed hugely to the success of this project.” ■



Support work around and in front of existing buildings

CHASE Technologies Punts Benefits Of LiFePO4 For Electric Forklifts

The aim of CHASE Technologies is to convert 50% of the current electric forklift market from lead-acid to lithium iron phosphate (LiFePO4) batteries within five years. "Given the accelerating current uptake of the technology by our customers, this is an entirely achievable and realistic goal," GM Brent Fraser comments.

CHASE is an acronym for Chemical and Solar Energy Technologies. Its main focus is the provision of energy storage in the form of lithium ion (Li-ion) batteries for forklifts in materials handling applications, in addition to battery-operated heavy equipment such as cleaning equipment, and related battery chargers.

The company has an exclusive distribution agreement with the highest-volume producer of heavy-duty LiFePO4 Li-ion batteries globally. These range from small 25,6V 135Ah units, right up to larger 80V 700Ah units.

This wide range means that CHASE Technologies can cater for most customer requirements in the forklift segment. Its all-aluminium casings, inserted in heavy-duty mild steel tanks, are manufactured especially at its Alrode South facility for extra durability and robustness. These can also be customised for specific customer requirements.

In addition, each battery comes with an integrated battery monitoring system (BMS) that safely manages the charge and discharge of the battery, while ensuring maximum possible lifespan. Another key differentiator is that CHASE Technologies has a comprehensive stockholding of both complete battery modules and spare parts, including

harnesses, and components for the BMS itself.

The Li-ion battery packs have an optional integrated telematics system for remote monitoring and fault-finding. They have been designed and manufactured specifically for the arduous operating conditions found in most forklift operations. "This is why our batteries have an unprecedented five-year, 12 000-hour guarantee," Fraser highlights.

Given that the rule-of-thumb economic lifespan of a forklift is typically 12 000 hours, this means that the battery is guaranteed for as long as the forklift is in operation. An added benefit is that, when the warranty expires, end users are still assured of years of use from the batteries before they have to be recycled.

CHASE Technologies has the capability to supply all Original Equipment Manufacturers (OEMs), as it is able to re-jig its battery packs to fit any brand of forklift. In terms of future growth and expansion opportunities, it will also look to supply ancillary markets such as golf carts, cleaning equipment, access platforms, and even back-up power solutions to assist with load shedding.

The company embarked on an extensive research and development programme about three years ago into the feasibility of introducing Li-ion technology into the South African market. Fraser points out: "Our first successful implementation was about two years ago. Since then we have been tweaking the technology in order to achieve the optimum configuration that suits the forklift segment and traction market in general."

Not only is LiFePO4 the most stable Li-ion battery technology available, it is also the least energy-dense. CHASE Technologies is therefore able to incorporate the inherent increased weight of the battery into the counterweight ballast of the forklift for the required stability and safety. ■



CHASE Battery charger



LiFePO4 Li-ion battery

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ABB provides engineered solutions for AC and DC drives across a broad range of applications. Designed to meet the exacting needs of your business or process, you can be sure that your technical requirements will be met and your business targets achieved.

In keeping with the latest trends of energy efficiency, local support from OEMs and reduced total cost of ownership, ABB South Africa offers complete packaged solutions for water and wastewater to mining and minerals, cement, petrochemicals and oil and gas industries.

Such packaged solutions range from the supply of medium voltage circuit breakers, inclusive of the required protection, to Variable Speed Drive (VSD) input transformers (if required), and correctly sized VSDs and motors for specific application. An e-housing can also be supplied in accordance with customer requirements.

A particular feature of the drive technology from ABB South Africa is the inclusion of a synchronous bypass option unit. This allows one drive to start and accelerate up to eight individual motors on pump or fan applications for maximum efficiency, says Sarel Pelser, MV Drives Product Manager.

The synchronous bypass unit does not impact drive functionality negatively. Apart from using the VSD as a starting and network synchronising mechanism via the

synchronous bypass unit, the VSD can also be implemented for process control functionality by controlling the motor shaft speed during system operation.

This has the advantage of reducing mechanical and process system transients while gaining controllability during start-up conditions. The VSD can control the motor speed continuously for unlimited periods, with the option of synchronising the motor directly to the supply grid.

This is available with the specific MV drive product portfolio from ABB South Africa, such as the ACS1000, ACS5000, ACS580MV and LCI. The power and voltage range covered with this functionality is 2 300 V to 20 kV (motor voltages), with a motor power range from 200 kW to 101 MW available upon request.

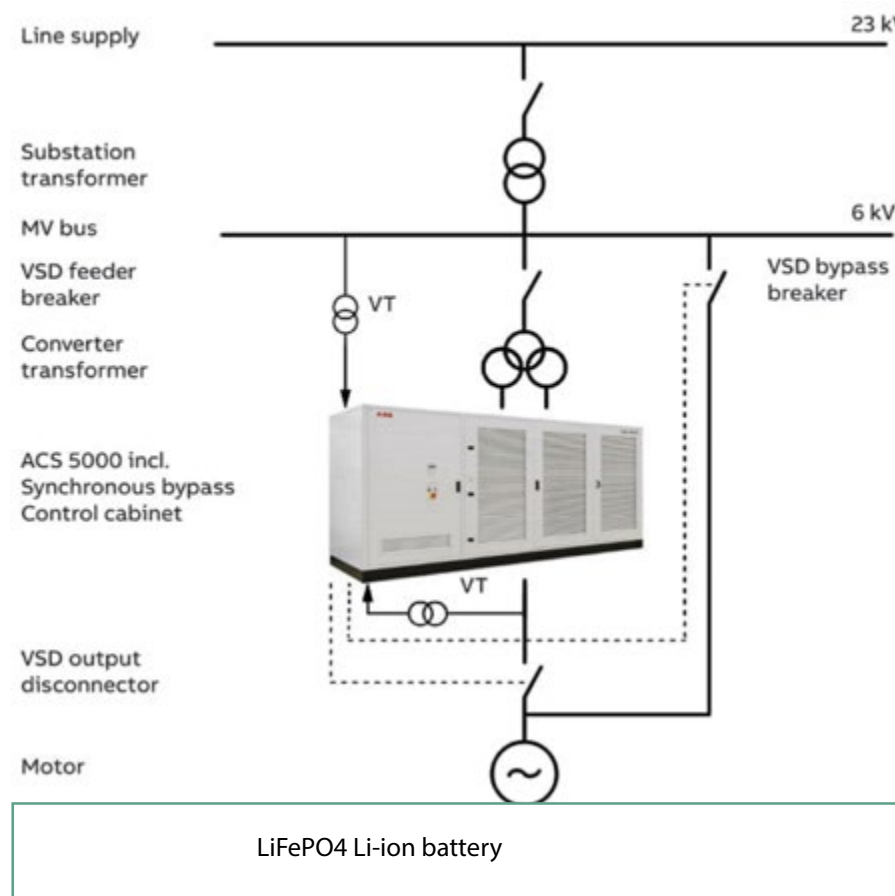
ABB South Africa specialises in large, complex and challenging customised application requirements. It has a large local technical sales and service support base in Southern Africa covering the entire industrial spectrum. Aftermarket support includes ABB Ability™ condition monitoring and remote assistance for drives. This ranges from rapid support for onsite problems, using the drive data that has been stored remotely to deliver accurate real-time information about drive condition and events, ensuring maximum equipment availability and reliability.

In addition, ABB Drive Care Agreements range from Initial Care, a free service for newly purchased ABB MV drives during the first year of the warranty, to CompleteCare, which allows customers to focus on their core business thanks to a fixed-price lifecycle agreement.

The future of your drives and systems depends on the service you choose. Your choice should be based on a well-informed decision. We have the expertise and experience to help you find and implement the right service for your assets. You have our guidance and full support along the course you take, throughout the entire lifetime of your drives.

ABB (ABBN: SIX Swiss Ex) is a technology leader that is driving the digital transformation of industries. With a history of innovation spanning more than 130 years, ABB has four customer-focused, globally leading businesses: Electrification, Industrial Automation, Motion, and Robotics & Discrete Automation, supported by the ABB Ability™ digital platform. ABB's Power Grids business will be divested to Hitachi in 2020. ABB operates in more than 100 countries with 144 000 employees.

www.abb.com





Dell Latitude 7220 Rugged Extreme Tablet – For Harsh SA Environments

The Dell Latitude 7220 Rugged Extreme tablet is now available to the South African channel from official distributor Drive Control Corporation (DCC). Configured to meet the demands of workers in harsh environments such as mining and construction, the Latitude 7220 Rugged Extreme offers mobility and connectivity in extreme conditions.

The tablet's durability offers peace of mind for those in some of the dirtiest, wettest, most challenging and most critical workplaces. Updated features include an enhanced 1000 NIT FHD display with anti-glare coatings, allowing customers to access and showcase their work even when out in direct sunlight. The screen is also glove responsive and multi-touch capable.

"Dell Rugged customers often operate in extreme, unpredictable environments which is why it is paramount that technology can withstand these conditions. Furthermore, with the tablet's various connectivity options users can connect almost anywhere, ensuring data is easily uploaded and transferred," comments George Lodewick, Dell EMC desktop and notebook Specialist at DCC.

The Dell Latitude 7220 Rugged Extreme offers performance and connectivity for ultimate field productivity:

- High-performance processing power for the most in-demand field applications. The tablet can be configured to individual user needs, with options including the latest 8th Generation Intel Core Processors boasting up to 2TB of high performance and reliable PCIe solid state drives;
- Reliability and safety in extreme environments: The tablet has passed MIL-STD-810G/H testing and is also IP-65 rated for protection against dust, dirt, and water ingress, along with hazardous location Class 1 Div 2 certifications. Drop tested from 1,2 metres and tested to withstand -29 to 63 degrees Celsius, the tablet is built to support most extreme environments;
- Uninterrupted power: Optional dual hot-swappable battery-architecture and on-the-go charging ecosystem for uninterrupted operation;

- Optimal Screen Interactivity: Anti-glare treatments on the 1000 NIT FHD displays provides excellent readability in all conditions. The new Rugged Active Pen and glove-capable multi-touch functionality enables a reliable pen and touch experience;
- Mission-critical connectivity: 802.11ax wifi, global 4G/LTE broadband and assignable RF pass-through options for WWAN, WLAN and GPS mean users can easily stay connected wherever they are;
- Integrated security features: A built-in infrared camera with Windows Hello facial recognition allows users to log in into their devices securely and easily plus optional next-generation fingerprint, contactless and contacted smartcard readers
- Easy integration: The Latitude 7220 Rugged Extreme tablet is compatible with most existing Latitude Rugged Extreme tablet vehicle and desk docks and previous generation accessories; and
- Support services designed to make unplanned downtime a thing of the past – Dell Pro Support Plus service options include 24/7 access to the most experienced Dell technicians and same or next business day onsite repair after remote diagnosis.

The Dell Rugged also comes with optional add-ons, optimised for extreme conditions such as:

- Rugged Tablet Dock - maximises productivity with an IP-65 rated dock for hazardous environments. It features dual-display support with VGA, Serial and Display Port outputs, and dual spare battery charging slots;
- Havis Vehicle Dock - a single docking solution with low-profile design that maximises available space inside a vehicle;
- Rugged Tablet Carrying Accessories - lightweight and flexible shoulder straps, durable nylon and rigid handles, and easy-to-use cross-straps and chest-straps; and
- Scanner Module - reads 1D or 2D barcodes and magnetic stripe cards and attaches securely to the back of the rugged tablet. ■



Electric Chain Hoist Offers Over One Million Operations

// Our newly launched C-series electric chain hoist has been designed using the latest technologies so that an enhanced and safe performance can be delivered, while offering an optimal lifetime value.

The unique C-series is a new generation in electric chain hoists which, through its innovative design, can be used for over one million operations" said Emil Berning, Managing Director of Konecranes and Demag (Pty) Limited.

Launched late in 2019, the C-series has been "built smart" with the toughness, precision and reliability of the company's Core of Lifting components. "It is our most advanced electric chain hoist yet, with a lifting capability of up to 5 000kg. Additionally, the C-series brings more control and mobility to working areas due to its new and more compact hoist shape," commented Berning.

The hoist, which boasts a redesigned motor cooling system, offers up to a 50% longer runtime than the previous generation, with a brake built for over a million operations. Safety features such as the operating limit switch and safety clutch have been enhanced for better performance and reliability. The redesigned chain sprocket pairing gives the chain a higher lifetime expectancy and ensures smooth and reliable operation.

Berning said "I believe that Konecranes has taken the electric chain hoist to a completely new level of operation through tangible state-of-the-art improvements that will make a major impact and difference to customer's lifting facilities".

Advanced lifting improvements

The C-series features an entirely new tough and durable motor. Less time is spent on servicing, resulting in more hoist uptime. The new motor also offers more effective cooling leading to a reduction in heat and offering greater power. A longer continuous operation with Cycling Duty Factor up to 60% is also a new enhancement.

The new self-adjusting brake system increases the coil life

and reduces lifetime costs, enabling over one million operations. An improved safety clutch system offers greater reliability while the updated fan gives more power. The brake always engages in the case of power loss, thereby increasing safety.

The redesigned sprocket works perfectly with the chain giving a prolonged chain lifetime. The C-series electric chain hoist also has a new top bracket design which is easily installed and multiple hoisting speeds with a 4:1 ratio are available. The bold new gearbox offers a tested reliability with lifetime lubrication which boosts productivity and lifting speeds. Performance and safety are also enhanced via the new safety clutch design.

New angles in hoisting

Designed for the efficient use of working space. Konecranes C-series is a product that takes into consideration operator requirements and ease of use. There is more comfort due to less vibration and lighter structures that give better working ergonomics. The C-series offers more control and mobility in working areas due to the improved shape and dimensions of the new hoist.

"The C-series is effective simplicity at its best, the hoist can be up and running in minutes due to its simple and fast installation. Less downtime always equates to greater efficiencies. The new design offers easy access to all components and adjustments based on production needs requires minimum effort, with the 2/1 reeving by turning the top bracket 180°," added Berning.

"I believe customers will see significant improvements in efficiencies, performance and longevity with the C-series electric chain hoist, which comes with the Konecranes technical support and online data access that we are renowned for," concluded Berning.

Konecranes' C-series is one of three new lifting products the company has recently launched; the other redesigned and improved equipment ranges are the S-series and the M-series. ■



Olympia International Paints Refines Its Colour Matching And Measurement Process

Title: Let's face it, finding that perfect paint colour to enhance your interior or exterior walls can be challenging at the best of times. Depending on the angle from which you're viewing, the amount of light coming into the area you're viewing, or the screen resolution of the device you're viewing from, your ideal colour can come up differently in each of these scenarios.

Olympia International Paints places strong emphasis on living up to its ValYOU brand promise by striving to bring the best in quality, value, and product to its customers at every touchpoint in the selling process. Its customer experience research has highlighted that their customers are spending a great deal of time in their online colour department, very likely matching colours to suit the requirements of their living spaces. In order for Olympia's customers to match their colours to their exact requirements, they have invested in devices called Spectrophotometers, which are paint colour matching devices, for their sales staff.

Called the Olympia Spectro, the Photometer allows one to measure colour on a variety of surfaces, and

then match that against a database of global colours, making these devices an ideal solution for achieving a quick colour match with a high degree of accuracy and consistency.

Palash Moodley, the CEO of Olympia Paints, says that Olympia Spectro offers real time colour matching, ensuring a rapid turnaround time from measurement to supplying tinted product.

The revolutionary handheld colour matching instrument is loaded with Olympia's full selection of colours ranging from off-whites, to pastels, to neutrals and naturals, to soft and muted tones and accent colours, and provides a powerful and versatile way of finding an exact match for any sample, and can even be applied to textured or patterned materials to give an accurate colour match.

Additionally, the instrument provides access to global colour selections, which brings the best global trends right to you. So, whether you're a painter, DIY enthusiast, or simply a fan of colour, Olympia's Spectro Photometer guarantees a 100% colour match every time. ■





Heavy Duty Traffic Door Is Lightweight

Known for its lightweight yet rugged construction, the Apex SR 9000 heavy duty insulated impact traffic door also offers ease of maintenance and long service life. The locally manufactured door opens easily, operates smoothly and allows safe, damage-free passage for personnel and equipment.

Available from Apex Strip Curtains & Doors, the Apex SR 9000 door is suitable for majority of applications where both pedestrian and motorised traffic move from one area of a facility to another.

All Apex SR 9000 doors feature a patented ABS outer shell forming a thick panel. This ensures the door retains its physical properties even in conditions where temperatures reach as low as -40°C . It is also impervious to moisture, acid, petroleum products, animal fats, rodents, insects and salt solutions. This makes this impact traffic door ideal for all types of environments including refrigerated or wash down areas.

The Apex SR 9000 door features bull nosed perimeter edges which prevent excessive wear on the edges. The doors are all mounted on an internal welded steel perimeter with corner gussets. Gasket keys are moulded in place and retain gasketing without the use of screws, rivets or other fasteners. Replacement of gasketing is simple and easily done on site.

Optional polyethylene spring bumpers, impact plates, partial edge gasketing, lower hinge guards and double pane vision panels are all available. ■



Apex SR 9000



Park Lane lobby



Dhiraj Ramsaroop, Project Lead, Paragon Architects

Paragon Architects Designs One Of The Tallest Buildings In Sandton

With a lot of the newer buildings in the Sandton area being imposing glass and steel structures presenting a hard skyline, [Paragon Architects](#), wanted to ensure that 1 Park Lane for developer Alchemy Properties had a unique identity.

Designing one of the tallest buildings in Sandton posed a challenge not only in interacting with the street level, but the surrounding area as well. This includes iconic buildings such as Discovery Place and the new Sasol head office.

The distinctive façade of the 20-storey 1 Park Lane was effectively softened by incorporating planting in the façade design, Paragon Architects Project Lead, Dhiraj Ramsaroop, explains. "As we ran through the different façade iterations, we quickly realised it was becoming quite a hard physical mass."

Paragon Architects envisaged a glass-covered building with aluminium fins on the east and west side. In order to soften the façade treatment, it was decided to incorporate planting. Another striking feature of 1 Park Lane is that, while the nine parking levels with 1 000 parking bays are treated as a separate element, they are nevertheless integrated seamlessly with the 11 office floors.

The building envelope consists of a mixture of A2-rated aluminium composite panels (ACP) and unitised glazing in a single energy-efficient system. With the building aiming for a 4 Star Green Star rating, a certain percentage of the east and west façade was blocked out to reduce the heat load on the interior, which in turn improved the efficiency of the HVAC system.

These ACP panels were integrated into the façade design by using current technology to variate the design, which was workshopped extensively with the façade engineers to ensure that the desired building aesthetic was achieved.

Natural ventilation is used for the parking levels, as opposed to the far more energy-intensive alternative of having to install a mechanical ventilation system. This was achieved by cladding the parking levels themselves with 30mm by 40mm aluminium slats, powder-coated in varying shades to add texture to the design. All of the parking levels are above ground, giving the building a unique identity among the larger-footprint buildings in the precinct.

The flagship 1 Park Lane forms part of the Katherine Street Mixed-Use Precinct, a 23 000m² GLA P-grade office development. When Bidvest Financial Services decided to centralise its Braamfontein head office and satellite operations at 1 Park Lane, it turned to leading Paragon Interface to design, space-plan and oversee the fit-out.

The visitor entrance is from Park Lane itself, into a common lobby and reception area that also features a coffee shop. A unique feature of the lobby are the planted walls, and the extensive use of planters and large, free-standing trees that effectively blurs the boundary between the interior and exterior, where streetscape landscaping continues the lush theme.

About Paragon

Paragon, established in October 1997, is an internationally active design business, based in Johannesburg. We deliver commercial architecture, masterplanning, interior design, and space planning to visionary clients in all property sectors, from retail to residential and education.

We are committed to global urban development. We are able and agile. Paragon is flexible and diverse in its approach to design. Each project is unique and not driven by style, but by lifestyle and a response to user needs. Elegant and efficient planning form the core of our designs. We understand the needs of our clients, and know how to generate ever new architectural forms in a competitive property market. ■



First Enviro Brick Unit Launched At GrandWest Hotel Complex

Leading the charge for local businesses making positive changes and developing sustainable innovations is Evaluation Flooring, the first luxury vinyl (LVT) flooring supplier in South Africa with a Greentag Certification on its internationally recognised flooring ranges of Amtico and mFloor. The company has embarked on the first phase of a sustainability project, a first of its kind in South Africa, that will enable zero waste in the LVT flooring arena and building industry as a whole.

As part of its campaign to minimise its carbon footprint, Evaluation has joined forces with Recycle 4 Africa Waste Management (R4AWM) to recycle offcuts and uplifts by transforming them into eco-bricks, pavers and potentially other re-usable products in the future. Thanks to some extraordinary progress, the first containerised unit to recycle material and create these eco-bricks has been set up at GrandWest Hotel Complex.

R4AWM has provided the containerised waste management unit (CWMU) systems, with more being manufactured as needed. It works by pouring waste into one side of the unit to be pulverised, heated, mixed and blended. A binder is then added and the mixture is poured into moulds, which are then cast into blocks or pavers. Anyone who has had training by R4AWM on manufacturing the blocks can use the machine. The container is equipped with the technology to convert non-recyclable or contaminated waste into enviro pavers and blocks. A heat box and mixing system is included in the container.

When asked what this exciting development meant for sustainability in the industry, Eva Kaiser, Founder of Evaluation Flooring, said: "Containerised waste management units will convert waste into viable building products and convert waste products from every industry into a generator of income for clients. All industries that generate waste can and should take advantage of eco-bricks."

The benefits of enviro blocks for businesses speak for itself. These blocks can be used in building strong, sustainable single-story structures, which is not only more energy efficient, but cost-effective, as the production process is cheaper. Also, the benefits these types of developments will have on our environment are huge. By adding value to all waste, it can be re-used and the environment will clean itself.

Kaiser also has strong thoughts on how this can be adopted into décor businesses to minimise landfill waste. "The product produces something called Enviro Aggregate, which can be cast into a variety of building products like water features, bird water baths and countertops. The imagination is all that limits the casting process. We have chosen blocks and pavers as these containers were originally designed for the rural areas to convert waste into blocks and provide employment at the source of waste generation. So, blocks in this context would be the most suitable finished product."

Kaiser further explains that eco-bricks are suitable for urban and rural environments. "The use of CWMU's would provide a sustainable employment opportunity for the youth and small businesses. The business concept provides for the upliftment of communities by leasing the containers or providing grants for the purchase of the CWMU's."

"Considering what the COVID-19 pandemic is doing to our world, I think it's important that we take the opportunity to start cleaning up our environment and reducing landfill sites. With the CWMU's, landfill sites could be vastly reduced, ensuring cleaner environments and better air quality. There are guarantees provided for the recyclable materials through the R4AWM company, including long-term business opportunities and suitable incomes to those in our community," concludes Kaiser.

For more information about Evaluation and R4AWM please visit <http://evaluation.co.za> and www.r4awm.com respectively. ■



Profica And Chattels Partner To Fast Track Delivery Of Emergency Healthcare Facilities

Construction solutions company, Profica, has partnered with temporary infrastructure specialists Chattels to deliver vital emergency healthcare facilities across South Africa. Rapid deployment of these facilities is underway to serve increased demands for triage and testing resulting from the Covid-19 pandemic.

Chattels has already constructed new temporary Covid-19 triage and potential field hospitals at Tygerberg Hospital, Victoria Hospital and Paarl Hospital in the Western Cape, the first of 17 to be erected in the province. Construction in other provinces is anticipated to start soon.

The temporary facilities erected consist of high-quality, weather-proof marquee-type structures, complete with floors, lighting and access control. These triage units serve as an extension of the hospital where potential Covid-19 patients can be screened and tested. There are also beds and oxygen available in cubicles for immediate treatment for more acute cases.

Provincial Health MEC, Nomafrench Mbombo, says, "When people come in with symptoms, or are concerned they may have the virus, they can go to these separate centres outside the hospital rather than the ER to be screened, so that we don't mix all the patients. We are also able to fast track testing so that we can flatten the curve." Mbombo says that in a worst-case scenario, if all the hospital beds are occupied, the marquee set-ups can be used for field beds for admitted patients.

A leading marquee hire and event company for over thirty years, Chattels Infrastructure Solutions has now successfully pivoted its skill and equipment to help in the fight the coronavirus epidemic. Profica brings specialist healthcare construction project management skills to the partnership as the company project manages construction going forward, with a portfolio of work delivered for major hospital groups and provincial government.

Profica and Chattels are able facilitate temporary infrastructure for hospitals, medical triage, laboratories quarantine facilities, medical facilities, testing stations, medical staff sleeping quarters near their hospitals and other structures that may be necessary. The full turnkey solution includes flooring, decking, ventilation, extraction units, all plumbing, ablution facilities, all electrics, internal walling, heating/cooling room, climate control facilities, bedding and isolation booths.



Jaco Nel of Profica

Ventilation is a critical aspect and these systems have been specially designed with expert mechanical engineers to ensure that the required air volumes, relative pressures, filtration standards and airflow direction works according to the clinical purpose of the room. A high turnover rate for persons being tested is expected and therefore the air quality in the room needs to be 99% clear of airborne contamination, within six minutes of the test being completed, in order for the next sampling test to be done. The sampling booths in the tent have special systems for air changing as these are most critical as may have infected patients in them.

Jaco Nel of Profica, says, "Dramatic healthcare capacity expansion has to be a priority now, and the pressure is on to find innovative ways to expand and upgrade both temporary and permanent infrastructure. Profica is committed to using our in-house expertise in the healthcare sector, from technical advisory services to design to working with multiple specialist providers, to add value. We're proud to be working with Chattels to give our medical staff at the front lines the best possible environment as they fight the battle against Covid-19." ■

Superb Hardscape With Terraforce At Dubai Hills Estate

Dubai Hills Estate is a unique blend of elegantly planned neighbourhoods crafted around a magnificent 18-hole championship golf course, by Emaar Properties and Meraas Holding. Located next to the Al Barsha South community and the two major road networks of Dubai – Al Khail Road and Mohammed Bin Zayed Road – the estate is easily accessible and located in the centre of the city.

The project consists of various communities with different property configurations such as villas, townhouses, apartments and residential plots. The area is also set to boast three schools, three hotels, two hospitals, a 54km bicycle route, two metro lines and its own mega mall, Dubai Hills Mall.

During the planning stages of the estate, it became evident that the all the different levels created throughout the expansive site would leave many cut and fill slopes vulnerable to erosion, especially the spaces dedicated to outdoor activities and entertainment.

Consequently, Terraforce L16 retaining wall blocks, manufactured under license in the United Arab Emirates by Consent LLC for the past 14 years, were specified as a hardscape measure to provide effective and attractive erosion control in the third zone – residential communities Sidra and Maple – specifically designed for higher density villas and townhouses.

Says Sinan Awad, of Al Aamal Construction, Terraforce Recommended Installer: "Once the first walls were complete, the consultant and client were so impressed with the results more and more orders came in for Terraforce walls in the rest of the estate, requesting our services specifically.

They were especially impressed with the aesthetic finish and ease and speed of installation. Most of the walls range between 1m to 1,5m, with some reaching up to 3m. Installation therefore proved straightforward, as wall designs throughout fell into a basic gravity retaining category."

The result exemplifies a first-rate example of a low, understated earth retaining measures that allow for generous soft scaping, as is evident by the abundant grasses, creepers and shrubs that are planted in and long the rows of blocks.

Developer: Emaar and Meraas
Architect: KEO
Engineer: KEO
Main Contractor: ARCD
Sub-Contractor: Al Aamal Construction
Terraforce lock supplier: Consent LLC

Terraforce

Terraforce is a well-known and award-winning Cape Town-based company that offers interlocking concrete blocks (earth-retaining blocks) for environmentally friendly landscape retaining walls and erosion control. Is a member of the Concrete Manufacturers Association (CMA) and a Level Four B-BBEE Contributor.

Terraforce pioneered the hollow, reversible interlocking concrete block that is unmatched in its versatility, both in application and elevation. Suitable for commercial and residential landscape retaining walls, small or large.

The wide range of plantable retaining wall blocks is tailored to create environmentally friendly domestic or industrial installations and to support sustainable development in soil stabilisation. Walls can range from light gravity retaining walls to geogrid reinforced earth-retaining or heavy gravity, double skin walls. ■



Hardscaping with Terraforce, Dubai Hills Estate



Vertical rock face wall, installed by Al Aamal Construction



Terraforce was specified as an erosion control measure for the Estate



The walls are landscaped with grasses and shrubs



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People in Construction



Tibor Szana, Chief Inspector: Occupational Health and Safety, Department of Employment and Labour

Notice Regarding Implementation Of Ergonomics Risk Assessment And Medical Surveillance In Terms Of Regulations 6 and 8 Of The Ergonomics Regulations Of 2019, Respectively

Department of Employment and Labour

Under section 40 (3) (b) of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993, as amended), I, Tibor Szana, appointed as chief inspector in terms of section 27 (1) of the said Act, and by virtue of the powers delegated to me by the Minister of Employment and Labour, in terms of section 42 (1) of the said Act, hereby grant the following temporary exemption from Regulations 6 and 8 of the Ergonomics Regulation of 2019 in terms of section 40 of the said Act: For an employer to perform an ergonomics risk assessment and place an employee under medical surveillance, until the 30th June 2021.

Signed
Tibor Szana (Mr)
Chief Inspector: Occupational Health and Safety

Construction Industry Events 2020

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



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



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



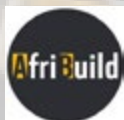
Africa Build Show (ABS) - Virtual
Exhibition (VE) edition - 28 September
- 02 October 2020



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



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



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



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