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LET'S BUILD A BETTER TOMORROW TOGETHER.

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Master Builders South Africa welcomes the much-awaited Draft Construction Sector Charter which was recently released for the mandatory 60-day public comment period by the Minister of the Department of Trade and Industry who stated: “The Construction Sector Code remains one of the key sector codes that affect domestic infrastructural development and as such, is one of the catalysts for the implementation of B-BBEE in the country.” (see Page 10).

The Amended Construction Sector Code recognises that the nature of the construction sector is dominated by joint ventures and outsourcing. However, in order to ensure that outsourcing does not dilute the actual benefits accruing to black people, it stipulates that no more than 25% of the value of a contract can be outsourced to an entity or entities with a lower B-BBEE status level.

This will also have ramifications that will need to be well understood for transformation to be advanced and take root in the new era of 30% ‘set-asides’ as contemplated in the Draft Preferential Procurement Policy Framework Act which is currently under consideration by National Treasury through the Office of the Chief Procurement Officer after the public comment period closed in July.

The above-mentioned DTI media statement was also preceded by a much welcome concession in the application and interpretation of Empowering Supplier Status which replaced Value Added Status under the renamed element of Enterprise and Supplier Development (ESD).

The DTI have communicated (Gazette No.40375) that a concession will be awarded on the Empowering Supplier status. Previously, only Exempted Micro Enterprises (EMEs) were automatically granted the Empowering Supplier Status.

As per this notice, however, all suppliers with valid B-BBEE certificates issued before or on 30 April 2016, regardless of whether they are Exempted Micro Enterprises, Qualifying Small Enterprises or Generic Enterprises, are considered to be empowering.

The notice further confirms that all valid B-BBEE certificates issued on or after 1 May 2016 would also be deemed to be empowering, irrespective of the company size or black ownership, until further notice. This is a significant concession.

Master Builders SA urges all its members to ensure that they are in possession of valid B-BBEE Certificates.

Similarly we look forward to the finalization of the Draft Preferential Procurement Policy Framework Act. This will go a long way towards providing policy and regulatory certainty in what is an already ‘congested’ regulatory environment which also brings about ‘compliance fatigue’. We do however accept that regulation is a necessary evil which can sometimes become a blunt instrument if not applied and enforced effectively.

We commend the Minister of Finance, Mr Pravin Gordhan for the delicate balance he managed to strike under very difficult fiscal and macro-economic constraints as he delivered the Medium Term Budget Policy Statement (MTBPS) late last month.

It remains to be seen whether the Minister of Finance and the National Treasury in particular as well as the Government in general have done enough in terms of fiscal consolidation to stave off a potential ratings downgrade by the rating agencies when they visit the country next month. The country and the sector could use some festive cheer in what has been a tumultuous and whirlwind year.

On behalf of Master Builders South Africa, I wish you all a joyous, safe and relaxing festive season and a prosperous and constructive 2017.

Bafikile Bonke Simelane

Significant B-BBEE Concession Gazetted

Bafikile Bonke Simelane
President, Master Builders South Africa
Au revoir Pierre ...

At a quiet, informal and intimate luncheon held in Irene in October, the staff of Master Builders South Africa bade au revoir to industry stalwart and long-standing Master Builders SA Director, Pierre Fourie, on his retirement.

The event was attended by the full complement of Master Builders SA staff, Pierre's lovely wife Escél, Master Builders SA Past President Eunice Forbes and a number of industry colleagues and friends.

Addressing the gathering, Executive Director of Master Builders SA, Roy Mnisi, extended heartfelt thanks for all Pierre has done for Master Builders SA and the building and construction industry over the years. In particular, he thanked Pierre for his guidance and support during 2015-2016 and for staying on in his role as Operations Director beyond his June retirement date to assist with the smooth running of Congress 2016.

In her address Eunice Forbes noted that Pierre's considerable depth of industry knowledge and expertise has been an invaluable asset to Master Builders SA throughout his tenure. She expressed her gratitude to Pierre for his quiet leadership capabilities and friendship, noting that as a "people's person," Pierre always enjoyed working closely with his Master Builders SA colleagues, the Presidents and Directors of the MBAs and the industry as a whole. His open and professional management style will be sorely missed.

Marie Ferreira, having worked with Pierre for most of her career as secretary and personal assistant, gave thanks to Pierre for all the years spent working together, for his mentorship and quiet, approachable demeanour.

Pierre in turn reminisced about the "old days," describing the growth and development of the (then) Building Industries Federation South Africa (BIFSA) from the '90s to its present format as Master Builders SA. He expressed his sincere thanks to the staff of Master Builders SA, the Presidents past and present, and the directors and staff of all the Master Builders Associations for their contribution to making his career and the friendships developed so very rewarding.

Pierre anticipates remaining active in the construction industry by making himself available for occasional consulting work.

Au revoir Pierre! On behalf of all our readers we wish you a peaceful, happy and relaxing retirement spending precious time with your family.

Pierre Fourie, Operations Director of Master Builders South Africa, completed 25 years of continuous service with the Federation.

Highlights of Pierre's career with Master Builders SA include:

- Significant involvement in the organisation of the Federation's annual Congresses having attended all 25 during his tenure;
- Became CEO of BIFSA in 2001 and in 2004 he led the name change from BIFSA to Master Builders SA;
- Contributed to the formation of the National Home Builders Registration Council (NHBRC) in the mid-nineties, as well as the Construction Council for South Africa (COCOSA); and the Construction Industry Confederation (GIO) in 1997;
- Witnessed the introduction of various new statutory bodies such as the Construction Industry Development Board (CIDB), the Construction Education and Training Authority (CETA) and the Council for Project and Construction Management Professions (SACPCMP);
- Served on the Board of the Joint Building Contracts Committee (JBCC) as well as on the NHBRC's Industry Advisory Council;
- Chairman of the Contract Price Adjustment Committee (CPAP) and a member of the University of Pretoria's Department of Construction Economics Advisory Board.
Students get their start in construction health and safety

According to the latest statistics from the Federated Employers Mutual Assurance Company (FEM), there have been 5,716 accidents on construction sites across the country in 2016, with 51 being fatal and 468 resulting in permanent disabilities.

Recognising that construction health and safety is crucial to the building sector, the Master Builders Association of the Western Cape (MBAWC) has, for the first time, provided a course enabling participants to acquire a South African Qualifications Authority (SAQA) approved Certificate in Construction Health and Safety. This is one of the many training opportunities offered by the MBAWC.

Ten students were accepted into the two-year long programme; each having completed their introduction to the building industry, including all trades, excavation and electrical as well as two months of theoretical training at a technical institution. Now they have been placed with MBAWC members to implement their practical training.

Tony Keal, group skills facilitator at the MBAWC, says: “On completion of the programme, the learners will be equipped to work in the construction industry with a broad understanding and knowledge of construction health and safety, as well as environmental legislation and controls.” He adds that learners accredited with this qualification will be able to responsibly, independently and effectively identify and evaluate occupational safety, hygiene and environmental factors, thereby promoting a culture of health and safety on construction sites.

Course participant, Sarah Malgraaf, from Kuils River, shares: “I feel very humbled and privileged to have been nominated to do this course. I have particularly enjoyed learning about the legislation and how I can apply this on site.”

After their first year with MBAWC member companies, the students will return to the technical institution for another two months of theory before going back to their employers. Once they have completed the programme, the learners will receive an NQF Level III qualification, recognised by the South African Council for Project and Construction Management Professions (SACPCMP) - a substantial component of applying for their professional status.
In October, Master Builders Association KwaZulu-Natal held its annual awards evening at the Durban International Conference Centre, where members of the association were once again honoured for achieving exemplary standards in excellence in construction and occupational health and safety. KwaZulu-Natal based construction companies showcase their work and celebrated industry excellence at this prestigious event. Among the 500 delegates in attendance were members of the association, award winners, industry stakeholders and government representatives.

President of the Association, Mrs Dolly Tembe, opened the gala event by conveying a warm welcome to all delegates. She honoured entrants in both competitions by expressing her sincere admiration and gratitude to those who strive to raise the bar with respect to industry standards. The president stated: “The building industry prides itself on maintaining standards and this culture is promoted by the association on an ongoing basis”.

Master Builders Association KwaZulu-Natal Safety Manager, Neil Enslin, indicated that striving for excellence in occupational health and safety is a very special calling reserved for those who are unrelenting in their commitment to ensuring the well-being of others. He went on to state that they do so by practising occupational health and safety to the highest possible standard and that the association was extremely proud of them. There were 27 entries this year and sites were audited on more than 20 different elements, consisting of over 1 000 sub sections and the majority of entrants scored upward of 90%.

Vikashnee Harbhajan, Executive Director of Master Builders Association KwaZulu-Natal, said that the association champions excellence in construction, in its quest to promote quality infrastructure development. Addressing the audience, Harbhajan said: “As a key economic driver, the role of the industry cannot be overemphasised and it must be mobilised towards a culture of ongoing building excellence. This year there were 78 entries from 48 companies, recording a 70% increase in entries and a 71% increase in participation by member companies. This is testament to the fact that the association is successful in championing excellence in construction.”

The association has invested in several programmes in order to promote excellence in construction, and most recently its quality improvement programme, equipping the industry with the A to Z of building and other similar resources.

We congratulate the recipients of awards in all categories.

The following Special Awards were presented:
Ian Charteris received the highly prestigious Award of Merit in recognition of his outstanding and positive contribution to the KwaZulu-Natal construction industry.

The annual award for Women in Construction went to Patricia Moodley of Globacon (Pty) Limited.

Supplier of the year was awarded to NPC Concrete (Pty) Limited

Safety Person of the year went to Krishan Chettiar of Patcon Building & Civil Engineering Contractors (Pty) Limited.

The Supreme Award goes to the overall winner for excellence in construction and this award was presented to WBHO Construction for Growthpoint Illovo.

Master Builders KwaZulu-Natal was honoured to present Thelma Pugh of FEM with a special Master Builders Recognition Award, in appreciation of her positive contribution to advancing and promoting health and safety in the construction industry throughout her illustrious career.

Adding to the glamour of the event was MC Damon Beard and comedy by Tumi Morake.

Supreme Winner, WBHO Construction KZN, for Growthpoint Illovo Office Development

Vikashnee Harbhajan, Executive Director of Master Builders Association KwaZulu-Natal, pictured with Dolly Tembe, President of Master Builders Association KwaZulu-Natal

Master Builders Association KwaZulu-Natal
Winners of the Regional Safety Competition 2016

Manufacturers:
- Much Asphalt – Coedmore Branch (1st Nationals)
- Allied Trades:
- RMD Kwikform KZN – Premises (4th Nationals)

Contracts under R10 Million:
- Patcon Building & Civil Engineering - Engen Refinery (1st Nationals) (Presidential Award)

Contracts R10 to R25 Million:
- Liviero Building – Coastal – KwaMnyandu Pedestrian Mall (4th Nationals)

Contracts R25 to R75 Million:
- Aveng Grinaker – LTA / Liviero Joint Venture – Pavilion Virgin Active Project (1st Nationals)

Contracts R25 to R75 Million:
- Liviero Building KZN – Jeff Taylor Crescent (1st Nationals)

Contracts R150 to 300 Million:
- Liviero Building Midlands Medical Centre (3rd Nationals)

Contracts over R500 Million:
- Aveng / Enza JV – Dr. Pixley Ka Isala Seine Memorial Hospital (1st Nationals)
- (Scaffolding Award) (Keep Durban Beautiful Award)

Plant yard:
- Aveng Grinaker – LTA Coastal KZN - Plant Yard (Presidential Award) (1st Nationals)
Master Builders Association KwaZulu-Natal Excellence in Construction 2016 - Award Winners List

Single Residential Buildings (under R5 Million)
Inyoni Homes CC for House Page - Abrams Crest
D Construction for House Charnaud

Small Works (under R10 Million)
D Construction for TKW Wood Chipper Plant

Commercial/Industrial Alterations, Additions & Renovations (under R20 Million)
F.S. Gonzalves Construction for Audi Centre Margate

Commercial/Industrial Alterations, Additions & Renovations (above R20 Million)
Ladysmith Construction JV for Sunrise Phase 1 & 2

Apartment/Town House Buildings (under R15 Million)
Ray Byrne Builders (Pty) Limited for St John’s - The Orchards

Apartment/Town House Buildings (above R15 Million)
R & M Construction & Paving CC for Lakeview Lifestyle Village Phase 5

Commercial Buildings (under R50 Million)
Shospec (Pty) Limited for Dabmar Manufacturing Plant, Dundee

Commercial Buildings (above R50 Million)
WBHO Construction KZN for Growthpoint Illovo Office Development

Retail Buildings (under R50 Million)
Stefanutti Stocks Building KZN for Bluff Shopping Centre Phase 2

Recreational, Leisure & Hotels (under R50 Million)
Susal Construction CC for Additions & Alterations to San Lameer Club House

Industrial/Civil (under R50 Million)
Action Asphalt for The Gates - Phase 2

Industrial/Civil (above R50 Million)
Stefanutti Stocks Building KZN for Mr Price Warehouse

Residential Alterations, Additions & Renovations
Graeme Kerr Building Contractors CC for House Norton

Health Facilities
H.A. Van Der Laan & Co (Pty) Limited for Alterations to Maternity Ward & Additions of Labour & Neonatal ICU Mediclinic Newcastle

Sub-contractors and/or Service Providers
Shospec (Pty) Limited for Sumitomo Rubber SA (Pty) Limited-Project Sunrise

Historical Buildings
Ray Byrne Builders (Pty) Limited for Clifton Indoor Sports Centre

Educational Buildings
Liviero Building (Pty) Limited for DUT Indumiso Campus Phase 1

Community Buildings
R & M Construction & Paving CC for Umdoni Retirement Village New Hall & Ancillary Siteworks

Special Projects
Liviero Enza Joint Venture for Addington Hospital

Economic Housing
S’Dumo Housing Trust for Mbizana 486 Rural Housing Project

Emerging Contractors
Sonqoba Motha’s Building Construction CC for 64 Nagtagal Street

Supreme Winner
Commercial Buildings (above R50M)
WBHO Construction KZN for Growthpoint Illovo Office Development
FEM Awards R1,035 million once off special merit rebates

At a Special General Meeting held on 19th October 2016, shareholders of the Federated Employers Mutual Assurance Company (RF) Propriety Limited (FEM) approved a distribution of R1,035 million to qualifying policyholders in respect of a once-off special merit rebate scheduled to be paid before the end of November 2016.

The purpose of the payment was reduced the Company’s accrued surplus and thereby align its capital position to board-approved long term strategic targets and to recognise and reward those policyholders who have made positive contributions due to their focus on health and safety.

Whereas annual merit rebates are determined based on policyholders underwriting results in each particular year, the special merit rebates were designed to recognise policyholders’ contributions to the company’s underwriting profits over the long-term. Consequently, the principles applied to determine policyholders’ qualification for the special merit rebate and their individual allocations are similar to those used for the annual merit rebate calculations, but have been adapted to cater for the longer calculation period applicable and is directly related to health and safety performance.

Relevant details of the main qualifications and allocation criteria applicable, including the period in respect of which calculations were performed can be found on FEM’s website at:


Contact
Head Office 011 3594300
Johannesburg 011 3594399
Cape Town 021 443220
Durban 031 2770660

“IT PAYS TO WORK SAFER”
With the spotlight on the South African education system over recent months, a welcomed announcement has been made by the Federated Employers Mutual Assurance Company (FEM), following the establishment of the R750 million FEM Education Foundation.

The FEM Education Foundation was formed by FEM policyholders in an effort to contribute to the education system, with a core focus on generating additional skills in the building industry.

Through the establishment of this education foundation, FEM and the construction industry is responding to the education crisis which has reached boiling point, both in the construction industry and within all levels of our education system. FEM has committed to this important initiative - the first step of an ongoing scholarship programme - which is to be made available to the children of employees in the construction industry.

"FEM thanks its policyholders for approving the establishment of the R750 million FEM Education Foundation and is proud to announce that this first initiative and launch of the programme is in partnership with Make A Difference Leadership Foundation (MAD Leadership Foundation) - one of a number of partners with whom we aspire to engage with," says Thelma Pugh, MD of FEM.

Initially, 37 scholars will be awarded scholarships providing comprehensive financial and personal support to assist them through high school and their first tertiary degree. This initial sponsorship amounts to an estimated R49 million, with the possibility of FEM allocating additional funding for scholarships in the following years. The first 37 applicants are currently being confirmed for 2017.

Founded by former Springbok captain Francois Pienaar, Make A Difference Leadership Foundation focuses on leadership development through education. The approach is to identify academically talented scholars, who do not have the necessary financial resources, and offer them integrated support in the areas of education, mentorship, leadership and lifeskills development.

Comments Francois Pienaar, "This partnership is a very exciting time for Make A Difference Leadership Foundation. It entrenches what we have aimed to achieve and builds on what we have been working towards, that is, to develop long-standing, mutually beneficial partnerships with corporates who share our values and goals. This allows us to create sustainable educational opportunities for young people with leadership potential who do not have the financial resources to afford a good education, thus providing hope to many scholars at a time in South Africa where such help is so desperately needed. This partnership presents to us an opportunity to expand our reach to identify, develop and support even more deserving young leaders year-on-year, allowing us to dream bigger for South Africa. We challenge and encourage corporates from other industries to step forward, as FEM has done, to invest in education and ultimately help grow your industry through a new generation of leaders."

Adds Pugh, "When the FEM Board, with the full approval of our shareholders, agreed unanimously that these funds be applied to the establishment of the FEM Education Foundation, it was immediately apparent to myself and the board that this was indeed the perfect opportunity to make a significant difference to education and the promotion of strong leadership within the construction industry through the meaningful growth of talented individuals. It is with great pride that, through the FEM-MAD partnership, we are able to put in place this first initiative to finance and nurture the first intake of selected learners through their secondary and tertiary education."

FEM will continue to work diligently and steadfastly on this programme in the years ahead, with a view to expanding it further and entrenching it within the building industry.

FEM was established as a mutual insurer in 1936 and, on the introduction of the Workmen's Compensation Act 1941, was granted a licence to continue to transact workmen's compensation insurance for the building industry. Its business operations are essentially confined to the insurance of employers against their liabilities under the Compensation for Occupational Injuries and Diseases Act 1993.

For more information, visit www.fema.co.za or www.madleadership.org.
CSCC urges construction industry to comment on the new Draft Construction Sector Code

The Construction Sector Charter Council (CSCC) has reminded the construction industry that the new Draft Construction Sector Code (DCSC) has been approved and was gazetted on 28 October for public comment within 60 days thereof.

“It is crucial, therefore, that stakeholders and interested parties in the industry submit any comment promptly to the addresses listed below,” says Thabo Masombuka, CEO of the Construction Sector Charter Council.

“The new Draft Construction Sector Code is not only aligned to the revised generic B-BBEE codes that were issued by the Department of Trade and Industry in May 2015, it also introduces a significant number of new measurement areas that seek to propel black economic empowerment to the next levels,” continues Masombuka.

The new Draft Construction Sector Code introduces, inter alia, the following:

- Increased targets for black ownership for both the contractors/ manufacturers and built environmental Professionals (BEPs)
- Assurances regarding black ownership status as a consequence of black shareholders exiting the measured entity
- No provision for a transitional period
- The Scope Of Application now includes BEPs; Contractors; and manufacturers and suppliers of building materials, plant hire and equipment.
- Exempted Micro Enterprises (EMEs) have the opportunity to enhance their B-BBEE level contribution
- Revised measurement of joint and unincorporated ventures (JVs)
- Revised measurement weighting points

Public commentary process
Interested parties and stakeholders should submit their comments on the Draft Construction Sector Code to the following:

At the DTI
Attention of Jacob Maphutha/Mologadi Leshiba
constructionsectorcode@thedti.gov.za

At the CSCC
Attention of Thabo Masombuka
Comments@cscc.org.za


It is envisaged that the new revised construction sector code will be in force by 1 March 2017.

SAICE 2017 president focuses on Code of Best Practice for tertiary engineering education

The South African Institution of Civil Engineering (SAICE) inaugurated its 114th president, Sundran Naicker, in Johannesburg in November.

Naicker, a director at Nyeleti Consulting, delivered his presidential address during an illustrious event with various champions of the infrastructure industry, government officials, engineering clients from both the private and public sectors, as well as SAICE past presidents and other members, attending.

In his address titled Code of Best Practice for Civil Engineering Tertiary Education (Code of Best Practice), Naicker explained that through his 20-year involvement with SAICE, he has realised the fundamental need of giving more attention to youth, graduate engineering practitioners and higher education. One of the strategic goals is to set up codes of best practice for civil engineering departments at universities and universities of technology. He said, “This goal was initiated two years ago, but the recent events in relation to #Feesmustfall and funding of university education, has demonstrated the relevance of this initiative.”

Naicker emphasised, “My single commitment on a deliverable for 2017 is the Code of Best Practice for Civil Engineering in Tertiary Institutions.”

Both the technical and academic universities’ head of departments (HoD) gave overwhelming support for the generation of the Code of Best Practice, which would give all institutions dealing with engineering education a guideline and benchmark to maintain and elevate world-class engineering schools in South Africa.

This document will also assist faculties of engineering to:

- Motivate for additional funding
- Provide less experienced academics with a reference document from which to build their profiles, and that of their departments
- Possibly become the benchmark for the Department of Higher Education.
What does the transformation of global power markets mean for SA’s renewables industry?

According to a recently released report from the International Energy Agency (IEA), the surge in renewables energy projects globally has changed power markets for good.

Over the next five years, the IEA forecasts that renewables will remain the fastest-growing source of electricity generation, with their share growing to 28% in 2021, from 23% last year.

Renewables are also expected to cover more than 60% of the increase in world electricity generation over the medium term, rapidly closing the gap with coal. Generation from renewables is expected to exceed 7 600 terawatt-hours (TWh) by 2021, which is equivalent to the total current electricity generation of the US and the European Union combined.

“We are witnessing a transformation of global power markets led by renewables and, as is the case with other fields, the centre of gravity for renewables growth is moving to emerging markets,” IEA executive director, Dr Fatih Birol, said in a statement.

South Africa’s Renewable Energy Independent Power Producer’s Procurement Programme (REIPPPP), which was launched in 2012, has contributed to the global uptake of renewables in recent years, but with national utility Eskom’s announcement that it won’t be putting out any more tenders for more renewables projects, it remains to be seen what direction the country’s renewable energy sector will take and whether it can seize the opportunity provided by an increase in the demand for renewables.

According to Eskom, “To prevent a repeat of the R4,27 billion net economic loss recorded in the first six months of 2016, Eskom should not sign the remaining expedited renewable IPPs, including bid window 4.5. In addition, costs linked to bid windows 1 to 3.5 should be ring fenced and funded separately,” the utility said.

The continued growth and opportunity for renewable project growth in both South Africa and the rest of the continent will be a keen focus area at the upcoming Africa Energy Indaba, Africa’s premier energy event - which takes place annually in February at the Sandton Convention Centre in Johannesburg. The event is the meeting place for Africa’s renewables deal-makers. At the 2017 event, as well as at its hugely popular annual IPP & PPA Conference, investors, renewables companies, utilities and African government representatives will come together to chart the way for a renewables sector in the region that continues to expand and attract investment.
Kohler reaffirms its commitment to Africa

Kohler Africa, a global leader in kitchen and bath plumbing products, has announced that its presence in Africa is fast expanding with dedicated showrooms in several sub-Saharan African countries including South Africa, Angola, Uganda, Kenya and Mauritius.

Laura Kohler

“The potential of this market was clear and we realised the need to further strengthen our African roots, prompting the opening of our dedicated office based in Johannesburg in February 2014. This office services the entire sub-Saharan region. The company will be opening a showroom in Nairobi, Kenya early next year and will drive further growth across the continent,” said Laura Kohler during a visit to South Africa in October. Laura is senior vice president – human Resources and Stewardship at Kohler Co.

Laura discussed the company’s stewardship programme, in which over 30 000 Kohler associates around the world join together serving as stewards to strengthen their surrounding communities. There are currently 50 locations worldwide actively driving initiatives and moving forward for the greater good.

Kohler has been awarded the plumbing supply contract for the new exclusive Tsogo Sun in Cape Town

The company has a legacy of over 143 years in innovation, bold design and a singular level of quality over a broad range of price points. The core pillars of the company remain firmly entrenched in modern art, design technological innovation and craftsmanship, aimed at creating a unique bathroom experience.

“We pride ourselves on being able to adapt our style to the markets in which we operate, and Africa is no different. Pivotal to the Kohler brand is the level of quality that remains consistent across the product range, guaranteeing consumers a high quality product unique to Kohler standards, irrespective of the price. The creation of sustainable products that conserve water is a given requirement for any product we develop, which is particularly important in Africa,” she added.

Laura discussed the company’s stewardship programme, in which over 30 000 Kohler associates around the world join together serving as stewards to strengthen their surrounding communities. There are currently 50 locations worldwide actively driving initiatives and moving forward for the greater good.

The Kohler Clarity water purification container is designed to provide safe drinking water for people all over the planet

She also highlighted the recently launched Kohler Clarity water purification product, which can filter up to 40 litres of water per day, meeting the drinking water needs of a typical family. With an estimate ceramic filter life of up to one year, Clarity costs less than 1 cent (USD) per person per day to operate. At the end of the filter’s useful life, the cartridge can be easily removed and replaced, eliminating the need to purchase a new system.

In keeping with Kohler’s sustainable product development mindset, the lid, base and nut contain recycled plastics from toilet seat production. The corrugated box, designed to minimise non-biodegradable packing material, is shaped to optimally fill a shipping container to reduce shipping costs and can be worn on the back for easy transport.

“At Kohler, we believe better business and a better environment go hand in hand. We believe it, and we act on it. We feel a responsibility to work in harmony with nature, and in everything we do, we stay mindful of our responsibility to future generations. We’re learning as we go, and six years in, we believe more firmly than ever that integrating business and environmental principles is undeniably better – for our company, our associates, our customers and the environment. We believe, for us, it’s the only way forward,” concluded Kohler.

“Tsogo Sun” in Cape Town
Truck #2 000 rolls off the FAW production floor

FAW Vehicle Manufacturers South Africa (Pty) Limited has achieved production of the 2 000th locally built truck at the Coega plant in the Eastern Cape.

Employees and plant management gathered to celebrate the occasion, with local and international FAW management congratulating plant workers for their consistently high compliance to quality production processes, since the plant’s start up in July 2014.

“With such a large workforce, our aim has been to keep the manufacturing logistics simple, yet thoroughly in line with strict built standards, as well as safety, health and environmental regulations,” said Jianyu Hao, CEO of FAW SA. “Thanks to a disciplined and dedicated workforce, we have maintained our standards and have even received an international FAW award in recognition for our outstanding quality.”

FAW SA says it is seeing growing returns, despite the sluggish markets. This is mostly evident in the steady advance in the number of exports, with local customers’ confidence increasing in the FAW brand.

These results affirm the initial trust and commitment made by the massive Chinese truck maker; and, to some extent, has spearheaded other Chinese goods manufacturers to invest and expand their operations to South Africa.

Sales of FAW trucks have tracked strong upward growth year-on-year over the last few years (2013 to 2016). To date, the FAW medium-weight 8,140FL range was ranked second in the 5 ton truck segment. This after only one year on the market. On introduction, it was lauded as the lowest-cost-per-ton vehicle in its segment, and still today, it is one of the most affordable and efficient trucks available in this category.

HAO confirms: “We have become a proud business citizen of South Africa and positively affirm our original assessment of SA with the motto – ‘Built in South Africa, for Africa.”
Contractors in the built environment face numerous challenges in the constrained market conditions of today. Primary amongst these is the need to dramatically improve productivity on-site, which is exacerbated by the fact that majority of projects are fast track. This places contractors under even more pressure in terms of delivering within a shortened construction programme schedule.

Add to this the challenges of containing costs, eliminating wastage and pilferage, while delivering with reduced margins.

Amit Dawneerangen, national sales manager: Gauteng, AfriSam, says that in the changing construction environment, it is essential that contractors take an overall view of project costs and not just look at individual material costs.

Significantly, and in response to demands from contractors for increased convenience, AfriSam developed its AfriSam Dry Mortar product. This allows immediate access to an already blended dry mortar solution and, according to Dawneerangen, is proving to be very attractive to time-pressed contractors.

The AfriSam Dry Mortar solution offers contractors a number of benefits in addition to time and cost savings. Using a pre-blended mortar mix will ensure optimum product integrity and subsequently, quality construction on a project.

“The repeat business is always a strong testimony for a product and the reality is that once a customer has experienced the AfriSam Dry Mortar product, it becomes a standard on all of the contractor’s projects.” Dawneerangen says.

“Customers who have used the product have been particularly impressed with the finish achieved when used in plaster applications. In some cases, architects on projects have also commented on the superior finish and are starting to specify the product because of its aesthetic value.”

Dawneerangen says that the use of superior sand is essential to produce a quality plaster or mortar, as this raw material makes up as much as 80% of the mix. In addition to using superior quality sand, it is also critical that the sand be completely dry prior to the blending process to prevent any possibility of the cement reacting to the water content.

AfriSam has partnered with Stick a Tile to produce the innovative mortar and plaster solution. The sand used in the AfriSam Dry Mortar product is quarried at the Stick a Tile operation in Meyerton.

“The sand being used is consistent from a grading perspective and the particle size distribution lends itself to producing a superior end product,” he says. “Use of inferior sands in these mixes not only affects the strength of the plaster or mortar, but also impacts negatively on the workability as well as the finish, especially in the case of plaster.”

After being quarried, the sand is dried to the requisite level, and blended with AfriSam’s All Purpose Cement in a controlled environment at this bespoke plant. The plant has a 400 ton per day capacity and is fully automated. Batch printouts are produced to verify consistency and ensure optimum quality.

In addition, samples of the dry mortar product are taken at regular intervals and tested at AfriSam’s Centre of Product Excellence to ensure compliance with the required specifications.

Repeat business for AfriSam dry mortar underpins benefits to industry
Dawneerangen says the traditional methodologies used for mixing of mortar and plaster lend themselves to scenarios where there is a lot of wastage. “Removing the human error element from this process has seen a number of contractors significantly decrease wastage and, more importantly, increase the productivity on-site allowing them to bring projects to completion on time and within budget,” he says.

Manual blending of a mortar is labour intensive and time consuming, and requires careful attention to ensure the correct ratios of sand and cement are used. Incorrect blending or mixing will certainly affect the final product and, in the case of plaster, result in cracking.

The AfriSam Dry Mortar solution alleviates human error and goes a long way to ensuring the integrity of the work being done. This Class II mortar has been specially engineered as a dual purpose mix that can be used for both mortar and plaster work. It will achieve a minimum strength of 5 MPa at 28 days.

Dawneerangen says that SANS 50197 compliant AfriSam All Purpose Cement was selected, as this cement offers a spectrum of functional attributes that provide customers with guaranteed quality performance in concrete, mortar and plaster applications.

“It is an advanced composite cement containing milled clinker, as well as advanced mineral components and additives, and therefore the ideal component for the AfriSam Dry Mortar product. While offering the lowest carbon footprint in the 42.5N strength class, this cement ensures optimum workability, another important requirement for contractors.”

The AfriSam Dry Mortar product is supplied in either 10 ton or 20 ton silos, offering optimum flexibility as customers can then decide on the size required based on individual project requirements. By supplying product in silos, there is a considerable space saving advantage on a construction or building site as the need to accommodate large stockpiles of sand and store bagged cement is eliminated.

To add to this, stockpiled building materials are often pilfered on site and by using the AfriSam Dry Mortar silos, theft is virtually eradicated and there is a similar significant reduction in wastage.

The 10 ton silo is delivered fully loaded from the facility, while the 20 ton silo is delivered to site empty and filled via bulk tanker. Discharge into the silo is conducted using a closed conveyance system which ensures product integrity and the elimination of any dust during the process. Not only does this guarantee optimum quality of the product, but the process also complies with all the requisite environmental regulations, a factor that underlines AfriSam’s long-term commitment to environmental stewardship.

Dawneerangen says that on smaller projects where automated systems are not being used, the dry mortar can be discharged from the silo directly into wheelbarrows or other mixing vessels. Other options include attaching a mixer with a water tank to the silo so that when dry mortar is discharged, it comes into contact with the water from the tank and delivers a product that is ready to use. This wet product is then discharged into a utility unit such as a dumper or concrete hopper. Where high rise construction is taking place and there is a need to convey the mixed mortar upwards, a mortar pumping system would be connected to the silo to facilitate the easy transfer of the product.

Another area where productivity is being realised by contractors is in terms of procurement, as it is no longer necessary to deal with a number of different contractors, i.e. procurement of sand from one supplier and then bagged or bulk cement from another.

“It is an exceptionally simple one step order process for AfriSam Dry Mortar, and the construction industry is already realising significant gains from this innovative product.”

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Start a profitable blockyard – but do your homework first

With South Africa experiencing a critical shortage in housing, the manufacture of concrete bricks and blocks would not only help provide affordable building materials but also assist in the establishment of small businesses, says Matthews Magwaza, lecturer at The Concrete Institute’s School of Concrete Technology.

Magwaza says the small-scale production of concrete bricks and blocks for masonry is ideal for small businesses. “Manufacturing can be carried outdoors, the process is simple, and the equipment required not exorbitantly expensive. But before starting any brick and block manufacturing operation, it is essential to investigate the economic feasibility of the venture.”

He says it should first of all be determined what the demand is for concrete blocks and bricks in the proposed area of operations, and check to see if there is competition from other blockyards. Only once that has been established, should costs of production and output enter the equation.

To assess costs, factors such as the following should be taken into consideration:

- The purchase price or rental of the site;
- The cost of site improvements, such as fencing, paved areas for production and stockpiles, pathways, roadways and buildings;
- The cost of equipment such as a concrete mixer, blockmaking machine, and various other equipment such as tools, wheelbarrows, and trolleys;
- Water and electricity tariffs;
- The material costs. “As a rough guide, assume one cubic metre of loose aggregate will yield 0.7 cubic metres of concrete volume,” Magwaza explains;
- The projected output in terms of number of blocks required, as well as the dimensions, and whether the blocks would be solid or hollow;
- Wastage volumes;
- Maintenance costs of the equipment and site;
- Labour costs; and
- The cost of obtaining start-up finance.

Magwaza says in selecting a site, the blockyard operator should consider the distance to the suppliers of raw materials, the market for the blocks and bricks, where the labour force to be hired lives, the quality of security in the area, and availability of services such as roads, water, sewerage, and electricity.

“The ground should be relatively level, as steep slopes make handling and production difficult. The site should also be big enough for stockpiling aggregates as well as cement, production equipment, block stacking, staff facilities, a small office and on-site access. Concrete slabs should be provided for the storage of cement (ideally in a weatherproof room, covered with tarpaulins and raised from a possibly damp floor), as well as aggregate stockpiles which tend to be unusable after being in prolonged contact with the soil. Aggregate stockpiles should be on a slight slope so that rainwater does not collect in the aggregates.”

He adds that the size of the production area depends on the method of producing blocks or bricks. “A stationary machine, which forms blocks on pallets, needs a relatively small area with space around it for the operators. A mobile ‘egg-laying’ machine, on the other hand, requires a fairly large slab on which blocks are made.”

The School of Concrete Technology presents regular courses on making concrete bricks and blocks which provides empowering learners with a rudimentary understanding of how to manufacture masonry units. The half-day courses includes practical tuition in the school’s laboratory.

For further information on these courses, which are mainly presented in Midrand but periodically also in Durban and Cape Town, contact Rennisha Sewnarain on email rennishas@theconcreteinstitute.org.za or phone 011 315 0300.

A free publication on the subject can also be downloaded from the Institute’s website: www.theconcreteinstitute.org.za
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Training in concrete technology in high demand in Africa

Training provided by The Concrete Institute’s School of Concrete Technology is increasingly in demand in a number of sub-Saharan countries.

John Roxburgh, lecturer at the School of Concrete Technology, has recently conducted the School’s SCT20 Concrete Practice course in Lagos, Nigeria. The popular one day course - organised for key account managers of LafargeHolcim - includes a laboratory session and deals with, for example, the properties of concrete; mixing as well as placing and compacting concrete; formwork, reinforcement and joints; precast, pre-stressed and low-density as well as hot weather concrete.

Bryan Perrie, MD of The Concrete Institute, earlier this year also provided technical assistance for the construction of a new highway near Nairobi, Kenya.

Perrie, in early July this year, also conducted the School’s SCT22 Concrete Road Design and Construction course in Lusaka, Zambia. This course – which was attended by 18 civil engineering consultants – was presented in conjunction with the South African Road Federation. It is likely that the school will be asked to present further SCT22 courses in Zambia in future. The one day training focuses on the technology applied in the construction of concrete pavements and covers aspects such as supporting layers, thickness design (using The Concrete Institute’s cncPave computer program), as well as joint design, detailing and layout among many other subjects.

Perrie is a global authority on concrete pavements and currently is vice-president of the International Society for Concrete Pavements, based in Washington.

John Roxburgh, lecturer at the School of Concrete Technology, recently conducted training in Lagos

CMA issues first Mark of Approval for retaining blocks

Cement manufacturer, Remacon, has become the first company locally to receive the much anticipated Concrete Manufacturers Association Certification Services (CMA CS) Mark of Approval for its retaining wall block products.

The processes involved in the manufacture of the retainers, as well as the strengths and key requirements of the products were tested to stringent SANS specifications and found to be in full compliance. This means that wherever SANS requirements are specified by engineers for ground stabilization or other purposes, the Remacon products are legally certified for use.

Speaking at the handover of the certificate, CMA CS general manager, Christo van Zyl, said the CMA Mark of Approval is being implemented to cover all concrete products where SANS specification may be a requirement. It is proof of compliance with all criteria relating to the correct manufacture of the product, including methods, materials and testing, etc.

Silvio Ferraris of Remacon receives the first CMA CS Mark of Approval for its retaining wall block products, from CMA CS general manager, Christo van Zyl

Silvio Ferraris of Remacon said that having previously gone through SABS verification, the process was comparatively seamless. “The entire process from start to certificate took just three months. Although rapid, the process was intensive and thorough and this makes us particularly proud of our achievement. It is something that all our staff have been involved with from the outset and reinforces our ongoing drive for quality.”

The school is also likely to present training in Namibia later this year, and training presented by The Concrete Institute at the school in Midrand often draws students from other parts of Africa, including Ghana, Uganda, and Lesotho.

“In addition to the requests for training from other African countries, the school also has many distance learning students for our SCT41 and 42 correspondence courses: General Principles and Practical Applications of Concrete Technology & Construction. These courses are equivalent to stages 2 and 3 of training offered by the Institute of Concrete Technology in London, and ICT certificates are awarded to successful learners. The 2016 correspondence courses will start in September and we again expect strong support from sub-Saharan Africa,” said Roxburgh.

He added that the increasing recognition of School of Concrete Technology training by other African countries is testimony to the unmatched track record and respected status of the school. “With increasing unaccredited and unqualified training in concrete technology now being offered in South Africa, the School of Concrete Technology remains the trusted and leading provider of education in its field on the entire African continent.”

The school is also likely to present training in Namibia later this year, and training presented by The Concrete Institute at the school in Midrand often draws students from other parts of Africa, including Ghana, Uganda, and Lesotho.
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Concrete floors increasingly popular in housing

The staggering design options now available in concrete finishes make concrete floors increasingly popular in a variety of residential and commercial applications, says Bryan Perrie, managing director of The Concrete Institute.

“In addition to their customary role in warehouses and factories, concrete floors are now specified globally for housing, retail stores, trendy restaurants, and upmarket offices. In housing, concrete offers both aesthetic and practical options for flooring of key areas such as foyers, patios, kitchens, bathrooms, hallways, and garages.

“Concrete flooring is popular in kitchens because it is durable and easy to clean. It can be sealed against moisture damage and made virtually impervious to staining. Durability and water and moisture resistance are also making concrete a popular bathroom floor choice: textured techniques can be used to ensure that the surface is slip-resistant even when wet.

“Designers and home-owners are increasingly using decorative concrete floors in residential foyers for maximum ‘first impressions’. Enhancements for foyer concrete floors include stencilled motifs, multi-colour tile-like patterns, saw-cut designs, or floating concrete islands in shallow pools of water.”

“We sourced interlocking joint pipes (IJ) from Rocla for bulk internal stormwater applications on this project, due to the quality of the Rocla product. Additionally, their competitive pricing and close proximity to site resulted in reduced transport costs. Rocla supplied SC 75D IJ pipes in various sizes as well their 75 IJ pipes (Sil).

“Rocla were able to meet our short lead-in times and meet our deadlines with limited disturbance to our scheduling,” continued Van Veelen.

Rocla sales representative, Sarel Pretorius, commented “Rocla’s interlocking joint pipe is a non-watertight pipe particularly suited for use in stormwater applications. The male/female type joint is formed inside the wall of the pipe, therefore the outside dimensions of the pipe remain constant. The joint itself is used for centreing the pipe during laying operations making the process easier.”

The Musina Mall project utilises 422,422 tons of IJ pipes from Rocla, all of which met the delivery deadlines of client AJCOR Civil Projects.

Rocla manufactures precast concrete infrastructural products through an extensive network of factories throughout South Africa, Namibia and Botswana and can design and manufacture products to specification.

Rocla is part of the IS Group of companies which includes Techncrete ISG and Ocon Brick.
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Greater demands are being placed on concrete – a building block of our civilization – to reduce building costs and its footprint on the environment. This is the reason why construction chemical companies are constantly formulating and manufacturing new and improved admixtures that assist in producing concrete that is more suited to the ever more challenging requirements made by engineers and contractors.

Speaking at the recent South African Ready Mix Association (Sarma) conference, Marc Plancon, marketing director for Chryso, explained that due to urbanisation, readymix plants are situated further from construction sites. There is also a move towards vertical construction in big cities, where space is at a premium as well as an increase in underground construction.

Better concrete

“Traditional concrete simply cannot keep pace with modern requirements and for this reason, advances in admixtures are becoming increasingly important to produce modern concrete. There are many drivers behind the requirement for these products, but first and foremost it is about sustainable development, faster construction, as well as improving the characteristics of concrete.

“This is being hastened by new integrated design structures; and build-own-operate (Boo) - where a builder owns the building and needs the quickest possible return on construction investment. In order to operate profitably, these new age builders also need durability with less maintenance.

“In developed parts of the world there is a move towards sustainable development with the use of recycled materials becoming commonplace, as well as using more geopolymers and more manufactured aggregate. This has led us to develop new admixture technology to assist with meeting these and many more requirements,” said Plancon.

Smart solutions

He added that the admixtures available nowadays are vast and that the average concrete producer can compile a toolbox of admixtures that can enable them to produce almost any kind of concrete required. The admixtures include anything from water reducers, workability enhancers, place-ability, finish-ability and durability enhancers. These allow producers to save money and make money. “Usually the cost of an admixture is minimal compared to the required outcome,” added Plancon.

Admixtures are essentially concrete performance boosters that can alter concrete properties such as its slump, rheology, early strength, durability and shrinkage. One of the most significant developments, however, is in the robustness of the formulas being developed which means that mix designs don’t have to be changed but the new admixtures are robust enough to withstand a wide range of mix parameters and accommodate different dosing and mix ratios, without impacting performance of admixtures.

Rheology robustness enhancers for example, even allow for coarse sand to be used in place of aggregates, eliminate bleeding, improve concrete cohesion and do not have an impact on performance. New polymers also allow free flow concrete to be produced without losing its cohesive properties. This helps for pumping concrete long distances onto high rise buildings.

Technical expertise

“Admixtures provide solutions for most known challenges and if there is something specific that is required, we may be able to achieve the results by combining different types of admixtures or even developing new admixtures as required. But, either way, it requires the right technical support to make sure that it will meet the requirements of placement, curing, overall characteristics, durability and strength,” Plancon concluded.
PMSA: celebrating 40 years of innovation and customer service

Leading manufacturer of brick, block and paving machines on the continent, PMSA, is celebrating its 40th anniversary. The Original Equipment Manufacturer (OEM) continues to focus on technological development, such as the introduction of its new Ultravibe vibrating system.

PMSA has also been fine-tuning its internal processes and systems over the last five years, from automated tracking of spares and parts, to a new CRM system. “We have expended a large amount of effort and energy on putting systems in place to allow the company to grow,” comments MD Walter Ebeling.

The company is now in an ideal position to focus on ongoing technical innovation, such as the new Ultravibe. Not only can the new technology be retrofitted to its large range of existing machines, but it will also form the basis of a brand new machine under development by Pan Mixers South Africa (PMSA). “This will be a large pallet, 1 400 mm by 1 100 mm production board machine incorporating all of our latest advances in its design,” Ebeling reveals.

“We undertook these latest developments in order to allow our customers to be more productive. The best means of achieving this is if your equipment is more reliable. That is why we have been in business for 40 years, as we are continually improving our machines and technology,” Ebeling elaborates.

An example of PMSA’s ongoing product development is its new Eco range of automated handling systems. This gives customers the option of automated handling plants at a far more affordable price compared to the more costly top-of-the-range systems. The new Eco range includes forklift options as opposed to more conventional but higher cost finger and transfer car systems.

“With the building and construction industry facing pressure from reduced margins and a lack of new projects, PMSA is ideally positioned to help its customers fine-tune their existing assets so as to boost productivity and final quality,” Ebeling stresses.

“We are unique in the industry in being a specialist manufacturer that is able to cover the entire business spectrum, from establishing a business to boosting the bottom line through the application of appropriate technology.”

Walter Ebeling, managing director of PMSA

PMSA celebrates its 40th anniversary with ongoing product development
Getting creative with permeable pavers

Every so often, Terraforce earth retaining and permeable paving products are used for an unusual purpose, like this Terracrete creative wall designed by artist Dirk Bahmann in Doornfontein, Johannesburg, South Africa.

The Terracrete block is normally used for permeable paving to create plantable eco-surfaces for roads, parking areas, embankments and storm water channels, but in this case, another aesthetic reason called for this versatile paver block.

Says Bahmann: “The wall is located in my studio space, and while I work I wanted to design something interesting and beautiful to look at. Also, as the morning and evening sun passes through the blocks, creates beautiful play of shadow and light. I chose the Terracrete block specifically for their interesting patterns they would give the wall.

“In total, 49 blocks were used to build the wall, which is reinforced every course with Brice Force and tied into the concrete structure every second course with rebar, a relatively straightforward process.

“The plastering and smoothing out the roughness of the blocks, on the other hand, was a time consuming process, but well the worth effort!”

Bahmann aged 40, is a designer/maker, architect and artist, who lives and works in Johannesburg. He studied architecture at the University of the Witwatersrand and obtained his qualifications, a BAS in 1997 and B.Arch in 2000, with distinction. He has lectured at the Architecture departments at the University of the Witwatersrand and the University of Johannesburg.

His work spans and combines a number of diverse disciplines ranging from video art, animation, physical computing, sculpture, and architecture. Central to his work is the exploration of the existential dimensions of the nature of place of Johannesburg. The primary aim of which, is to attempt a wholesale reading of Johannesburg through documenting and articulating the specific qualities of this city.

In 2011, he was one of the recipients of the Ithuba Art Fund and 2013 was the winner of the Fried Autumn Fair and was selected to partake in the Lizamore & Associates mentorship program culminating in his first solo show in 2014.

Jason Frenkel : architect/contractor
Dirk Bahmann: architect/client
The formal quarrying industry is calling for companies within the industry to maintain their impeccable reputations for honesty and good governance.

Nico Pienaar of the Aggregate and Sand Producers Association of Southern Africa (Aspasa) said its producer members are responsible for supplying more than half the materials required on any conventional construction site and as a result should continue to act as sentinels of ethical business dealings within the construction industry.

“We also support recent calls for our CEOs to pledge support for firm financial governance across all spheres of government and the private sector to reassure investors and the likes of ratings agencies,” said Pienaar.

“This is a call to action to CEOs and leaders of member companies and their workforces to support honest business dealings and so support the sustainability of the industry, through to the construction industry as a whole and related supply chains. What we do today will have a direct effect on all of our futures,” concludes Pienaar.

WHAT A BLAST!

In November South African Builder was invited to the Drift Supersand quarry in Muldersdrift for a plant tour and to witness a blue rock blast. Our hosts were Pietman van Wyk, Mine Manager at Drift Supersand and Nico Pienaar, Director of the Aggregate and Sand Producers Association of Southern Africa (ASPASA).

Blue rock is the most sought-after rock type by commercial quarry operators as it is the best grade for production of construction aggregates for use in concrete — and the Drift Supersand quarry has blue rock in abundance.

Drift Supersand, a division of the JSE listed Consolidated Infrastructure Group, is an open cast quarry (mine) which produces a wide range of high quality aggregates for the building and construction industry.

The company has been operating for over 25 years and produces 1.3-million tons of crushed sand and stone a year. The company supplies aggregates to a wide range of commercial and civil contractors. Aggregate types include sand, gravel and crushed stone and is a major component of concrete. These aggregate have application in the following:

- Concrete
- Road base and coverings, as well as road stabilisation
- Asphaltic concrete and other bituminous mixtures
- Construction fill
- Concrete products, including blocks, bricks and pipes
- Plaster and gunite sands
- Railroad ballast
- Roofing granules and sand
- Filtration

This blast of blue rock at the Drift Supersand quarry in Muldersdrift produced over 30 000 tons of blue rock to be crushed and processed as aggregate for use in concrete by the construction industry. Photo: Modern Quarrying
A number of key criteria form the basis of establishing or replenishing capital equipment fleets based on performance and reliability, rather than simply making decisions based on a single brand mentality, or purely a price consideration.

Rather than putting all eggs in one basket, fleet owners should practice best-of-breed procurement, where the offerings of specialist manufacturers are purposefully weighed into the option. Some of the world’s highest rated plant equipment is manufactured by specialist manufacturers who concentrate their efforts on producing world beating machines of a certain type, such as excavators, wheel loaders, road building equipment and crushers.

With their reputation and livelihood invested in a single product type, original equipment manufacturers of well-known brands such as Sumitomo, Kawasaki, Ammann, Powerscreen processing equipment and many others, have proven to be masters of their trade by continuously working on perfecting their offerings.

Hand-picked partners
According to Desmond van Heerden of ELB Equipment, fleet owners who want to simplify their purchasing through a single supplier can do so by procuring from an established best-of-breed distributor, such as ELB Equipment. As a subsidiary of the nearly one century-old ELB Group, ELB Equipment has grown to become a leading capital equipment supplier with decades-old agreements in place with a full range of specialist manufacturers.

Provided the supplier can satisfy all (or most) of these requirements, then the buyer is on the right track to finding a suitable machine. “It simply does not pay to compromise in any of these departments purely to remain loyal to a brand. Also, never let cost price be your guiding light as one usually gets what one pays for,” concludes Van Heerden.
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Sika's structural strengthening for urban core station

A globally acclaimed structural strengthening system from Sika was chosen for the refurbishment of Pretoria’s Mabopane Station, the third busiest railway station in South Africa, handling some 115 000 commuters per day.

By identifying high-density activity nodes, called urban cores, the City of Tshwane's Metropolitan Spatial Development Framework aims to restructure the city to promote economic development and growth. Since 2000, when it was recognised as one such urban core, the area around Mabopane Station has already undergone several massive upgrade programmes, including access roads, 45 000m² of retail facilities, as well as addition of a bus and taxi rank.

In 2016, it was the turn of the station itself to receive refurbishment. Commissioned by the Passenger Rail Agency of South Africa (PRASA) as part of its National Station Upgrade Programme, MMA Posten Engineers SA wasted no time in specifying Sika CarboDur S1012 plates SikaWrap-300 C, SikaWrap-600 C and adhesives, Sikadur-30 and Sikadur-330. Sika’s Peter van Eden was the technical sales consultant advising on-site.

Specialist construction company, Freyssinet was appointed to apply the Sika system. Manufactured from carbon fibre reinforced polymer (CFPR), Sika CarboDur plates were bonded onto the station walls as external reinforcement. Although these non-corrosive, pultruded laminates are extremely strong and durable, they are supplied in lightweight rolls, allowing for easy transportation and installation. Sika CarboDur plates can be used in a variety of applications, including increasing serviceability, durability, load bearing capacity, or even for repairs to structural elements after earthquake damage. Extensive testing and approvals of this outstanding product are available from numerous countries worldwide.

Sikadur-30 (800 kits), a thixotropic, structural two-part adhesive based on a combination of epoxy resins and special filler, was used to bond a total of 10 420 meters of Sika CarboDur S1012 plates. Easy to mix and apply, Sikadur-30 provides excellent adhesion, hardens without shrinkage and is impervious to liquids and water vapour.

Constant dust from construction and earthworks in the vicinity hampered the project, while moving scaffolding around the busy station proved a further challenge for the contractor. As part of the specified structural strengthening system, SikaWrap-300 C (800 m) and SikaWrap-600 C (1 200 m) were applied to the station walls. Manufactured from unidirectional, woven carbon fibre fabric with mid-range strengths, both products are low-density for minimal additional weight, and are used in many different strengthening applications to increase flexural and shear loading capacity on reinforced concrete, masonry, brickwork or timber.

While SikaWrap-300 C is designed for installation using either a wet or dry application process, SikaWrap-600 C is designed for only a wet application process. Since the carbon fibre fabric is flexible, it is particularly suitable for application on different surface planes and geometry. In comparison to traditional strengthening techniques, SikaWrap-300 C and SikaWrap-600 C are extremely cost effective.

Sikadur-330 (869 kits), a two-part, thixotropic, epoxy-based impregnation resin/adhesive was used as a bonding agent for the SikaWrap products. Easy to mix and apply, it provides good adhesion to many substrates and requires no separate primer.

Structurally strengthened by such state-of-the-art products, Mabopane Station is destined to stand proudly for many years to come as the hub of this important urban core, while the highly progressive City of Tshwane Municipality is a step closer to realising its ambition of becoming an African capital city of excellence.
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We respect product standards and specifications as well as our clients.
Aloe Ridge, the largest social housing project in Pietermaritzburg, will soon be home to hundreds of families in the Westgate Grange area of the city. The development is constructed entirely of Corobrik’s facebrick.

Conceptualised by non-profit organisation, Msunduzi Housing Association (MHA), construction of Aloe Ridge began in November 2014 in an effort to provide much-needed reasonably priced rental accommodation for the lower to middle-income earners in the area. MHA is a social housing institution committed to meeting the needs of the community and, in addition to the conceptualisation and design of the project, MHA completed all the relevant funding applications, owns and oversees the development and will manage all the tenancies going forwards.

“We anticipate completion of the entire project by the end of May 2017,” explained Ivor Caldecott, chief executive officer of MHA. “There is a huge housing demand for households earning between R2 000 and R7 500 monthly, but not enough competitive private sector initiatives meeting this demand. Through this development, we are hoping to make a significant dent in this market.”

Caldecott said that, in addition to the provision of housing, Aloe Ridge will create 500 jobs for unskilled labour during the construction phase, as well as full-time, permanent employment for six general workers, six cleaners, six security guards, a housing supervisor, two letting agents and one rental administration upon completion.

The first phase of occupancy of 210 units began in October. Occupancy of the remaining units will be staggered until mid-2017.

The R353 million project — contracted by Stefanutti Stocks — has received funding from the Social Housing Regulatory Authority, KwaZulu-Natal Department of Human Settlements, National Housing Finance Corporation, as well as Msunduzi Housing Association.

Aloe Ridge, which will house an anticipated 4 000 people, will consist of 952 two-bedroom apartments in three-story walk-ups separated into two villages. Of the 952 units, 287 will cater for households earning up to R3 500 per month and the balance of 665 units will cater for households earning up to R7 500 per month. Each unit, which is approximately 45m² in size, consists of an open plan kitchenette, lounge, bathroom and bedrooms. The site is approximately 14 hectares in size, allowing for large, open spaces and play areas for children.

This is one of South Africa’s biggest social housing developments which has been constructed entirely of facebrick, namely Corobrik’s range of Burnt Apricot facebrick (3 800 000), Montana Travertine facebrick (200 000) and plaster bricks (3 965 000) as well as Geolok 400 (10 000) and Geolok 300 (10 000) for the retaining walls. Corobrik also supplied 2 000 m² of pavers for the walkways joining the various blocks as well as parking areas.

Originally the development had been planned to be constructed as a plaster and paint development. However, the efforts of Corobrik’s Rob Jardine, who worked with Lumen Govender and Aecom to demonstrate the benefits of a facebrick development and the life-cycle costing versus plaster and paint, swung the selection to facebrick.

Lumen Govender of Architechno — who worked in association with Sandhu Architecture on the project — explained the brickwork choice: “We wanted a product that would prove to be both affordable in start up and long-term costs. Corobrik’s facebrick range covered both criteria as there are no future maintenance costs related to plastering and painting.”

Govender said that, being a social housing project, the drive was to keep costs down while providing quality housing with
aesthetic appeal. “The colour of the roof sheeting, aluminium windows and external doors was selected to blend into the colour of the Burnt Apricot facebrick, which worked well.”

Explaining the planning behind the design of Aloe Ridge, Govender said the buildings were separated into two villages so as to manage the scale and visual impact more effectively.

“We wanted to create micro-communities within these villages as a way of creating a sense of place,” he said. “These micro-communities were then defined by articulating internal courtyard-style layouts. Here we anticipate the residents will form communities supported by the central courtyard space. Each community will then have an individual relationship within the courtyard and a broader relationship to those living within the rest of the housing development.”

To reinforce the broader relationship, Govender and his team created a major, central green space which can house related facilities for the entire community, such as a community centre or crèche.

“Allin Dangers, Corobrik’s director of sales, KwaZulu-Natal and Eastern Cape, said that the selection of facebrick would further reduce temperature regulation costs because of its incredible thermal properties.

“The thermal insulation properties of our facebrick mitigates the need for artificial heating and cooling, particularly important for the Pietermaritzburg climate,” explained Dangers. “The sound insulation properties also ensure a harmonious living environment for all residents while the enhanced fire resistance creates a safe living space.” In addition, Dangers said the aesthetic quality of facebrick meant it was a sought after product, particularly in the social housing arena. “It is important that every apartment feels like home for the residents, that it is somewhere they are proud to call home. Corobrik’s facebrick range meets this need every time.”

In line with new building regulations SANS 10400, Govender said that heat pumps were installed in all units, as well as insulation within the roof spaces.
The coordinated large scale production of affordable housing using light steel frame technology is the way to the future.

This is according to Peter Wiehahn of LSF Supplies.

The company has developed a blueprint design of a 35 m² two bedroom home, depicted in the images below, which is ideally suited for high volume production of a high quality housing product.

“This design is supplied and delivered in a flat pack configuration and is manufactured at a cost of around R120 000,” explains Wiehahn.

Key benefits of applying this technology include:

- The modular design consists of room sized units that can be transported to site easily and safely;
- The fast speed of construction enables a 30% saving in time and costs;
- Excellent performance characteristics meeting all building standards;
- Outstanding thermal insulation properties;
- High quality control in factory or on site; and
- Light weight - ideal for the Women in Construction Programme.

“We all know that we must ‘think out of the box’ in providing the housing solutions required to overcome the vast shortage of housing units required in our country,” says Peter. “And we believe that the light steel frame solution is the one solution which can make an enormous impact in addressing the housing shortage.”

The next steps in this ambitious initiative will be to secure buy-in to the concept from light steel frame manufacturers; and to establish a project coordination nodes within the Department of Human Settlements and the NHBRC to identify funding and priority areas for delivery and construction.
Nolunthando day care centre opens its doors thanks to Selcrete

South Africa’s housing shortage may be solved faster, cheaper, and more environmentally friendly way. By mixing cement with polystyrene, and an additive – a technique that is widely used in Scandinavia and northern Europe – Selcrete wants to do just that. The company’s pilot project, phase one of a revamped day care in the township of Khayelitsha, has been recently completed.

Speaking at the opening ceremony, Mayoral Committee member for Social Development and Early Childhood Development, Suzette Little, says she is very excited about the opportunities Selcrete and their Norwegian partners have brought to Nolunthando and the community of Khayelitsha.

Nolunthando day care centre cares for over 265 children aged 2 months to 6 years. "For phase 1, we have helped build a small utility hall, an administration block, and a starter kindergarten classroom using our product, blocks that are made of cement, expanded polystyrene beads, water, and a binding agent," says Graeme Horwood, Selcrete’s CEO. "12 new structures will be built in total."

"Selcrete makes a building two to three times more insulated compared to structures made of bricks and mortar. It offers better protection against fires and fungus too," he says. "The product is therefore very suitable for South Africa’s cold and often wet winters and hot summers."

The company is currently building an upmarket residence in Knysna, as well as a social responsibility rebuild in Khayalethu, a township near Knysna on behalf of Rotary for the Knysna Educational Trust. Selcrete is also presently negotiating a number of commercial and residential projects in Gauteng, KwaZulu Natal, and the Western Cape.

What makes Selcrete interesting for the South African market is that projects can be realised much faster, in over half the time of conventional homes. This could translate to a 25% cost reduction, Horwood says. "It is an attractive solution for budget-conscious projects like Noluthando, or even the low-cost housing sector, where quality, affordability, and time efficiency are very important factors. Delivery of low-cost homes in South Africa needs to take place, and quickly too," he continues, referring to Stats SA latest General Household Survey.

Selcrete is a greener product compared to most others, for instance due to the use of recycled polystyrene. "Because our blocks are made on site, they don’t have to be transported, which saves energy and minimises carbon emissions too," he says, adding that better insulation means that Selcrete buildings require less energy for heating and cooling. "This has a positive impact on carbon emissions, but also on people’s financial situation," Horwood says, noting that low income households typically spend more of their income on electricity than mid or high-income households.

Mavis Mbaba, who founded Nolunthando twenty two years ago when she opened her home to 45 children who needed to be cared for whilst their parents were at work, is excited by the improvements to her day care centre. She says: "These new buildings mean everything to me, and they will change everything at Noluthando. From now on, the children can do activities in a safe environment, without the risk of fires. Fires are a risk when working in a wooden building. These new buildings don’t require as much maintenance as the wooden ones. Maintenance costs a lot of money. So yes, I am very very happy."

Photos: Roger Bosch
Selcrete blocks are made of recycled polystyrene. It is a greener product compared to most others and the blocks are made on site and don’t have to be transported, thus saving energy and minimising carbon emissions. In addition, construction time is up to 25% faster.

Children of Nolunthando day care centre outside their new building
The new 10-storey Infinité poised to grace Bedfordview skyline

The burgeoning trend to apartment living has established the need for this luxury high rise development in Bedfordview.

This 10-storey, 200-unit new residential development, Infinité, is poised to change the East Rand skyline.

According to Dr Andrew Golding, CE of the Pam Golding Property group, Infinité is a major residential development project for Bedfordview that will set a new benchmark for modern living in the area, and cater for the huge demand being experienced for secure and convenient sectional title accommodation in the East Rand area.

Designed by AMA Architects, construction of the project will commence in February 2017 and will complete in 2019. The main contractor is yet to be appointed.

Located directly opposite Eastgate shopping centre, this is the first highrise development of its kind in Bedfordview. Existing sectional title apartment developments are few and far between, being in the region of five levels, with Infinité being the first 10-storey project launched in the area. The development includes a swimming pool, clubhouse with kitchen, gym and two meeting rooms, plus a lobby with concierge.

The luxurious and modern design of the building takes its inspiration from the mathematical infinity symbol, with clean, lucid lines and flow, and generous use of glass to capitalise on the scenic views and maximise natural light, particularly on the north and south façades.

Each with a terrace/balcony, the units in Infinité offer exceptional value for money, given the prime location of the site and quality of the development. Prices start from R890 000 for 40 m² one bedroom, one bathroom studio units, from R1,19 million for 40 m² ground floor units with exclusive use gardens of 25 to 62 m², from R1,075 million for 52 m² one bedroom, one bathroom units, and from R1,595 million for 79 m² two bedroom, two bathroom apartments, with loft penthouses selling from R2,97 million for 100 m² with two bedrooms and two bathrooms and from R4,49 million for 144 m² with three bedrooms and three bathrooms.

The project has been launched by respected property developer Baojin Chen, chairman of Fantasy Property, recognised for developing the Adriana in Sandton, as well as the successful, 28 666 m² mixed use development, Crown City in Crown Mines.

Says Chen: “The area to the east of Johannesburg is rapidly growing in popularity among home buyers, being in prime position within easy reach of the city centre, as well as being central to Sandton, Rosebank and Melrose Arch. The demand already being demonstrated for this exciting new development is underpinned by the increasing popularity of the appealing, leafy area of Bedfordview, coupled with all the fundamentals which attract home buyers and investors, namely location, convenience, quality and the very real potential for sound capital appreciation.”

According to Lightstone statistics, Bedfordview is a high-income suburb with a predominant LSM (living standards measure) of 10. Average selling prices in 2015 were R3,51 million for freehold and R1,25 million for sectional title property.
Events 2017:

Forthcoming events of interest to the construction industry

Forward details of your events to john@sabuilder.co.za for inclusion here

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<tr>
<th>2017</th>
<th>Event Name</th>
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<td>2017</td>
<td>Africa Energy Indaba</td>
<td>The Africa Energy Indaba addresses power generation products and services, oil and gas products and services, nuclear power, hydroelectric power, wave and tidal power generation services, geothermal technologies and services, biofuels, lighting efficiency services and related products and services.</td>
<td>Sandton Convention Centre</td>
<td>21 – 22 February</td>
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<tr>
<td>2017</td>
<td>KZN Construction Conference &amp; Expo</td>
<td>KwaZulu-Natal’s only dedicated event for the built environment. With over 80 exhibiting brands, dedicated zones, free to attend workshops, networking opportunities and more.</td>
<td>Durban Exhibition Centre</td>
<td>22 - 23 February</td>
</tr>
<tr>
<td>2017</td>
<td>Totally Concrete Expo</td>
<td>The African educational and networking platform for insights into the latest developments and technologies associated with the concrete and construction industry.</td>
<td>Gallagher Convention Centre, Midrand</td>
<td>23 - 24 May</td>
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<tr>
<td>2017</td>
<td>Cape Construction Conference &amp; Expo</td>
<td>The ultimate marketing experience for suppliers and solution providers to the construction industry.</td>
<td>Cape Town ICC</td>
<td>15 - 16 August</td>
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<tr>
<td>2017</td>
<td>112th Master Builders SA Congress – 2017</td>
<td>Addressing immediate issues and opportunities within the South African Building and Construction Industry</td>
<td>Century City Conference Centre, Cape Town</td>
<td>10-12 September</td>
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GBCSA appoints new top brass

The Green Building Council of SA (GBCSA) has announced the appointment of sustainability expert, Dorah Modise (previously Nteo) as its CEO, the highly experienced Rudolf Pienaar as its new non-executive board chair and Faieda Jacobs as Non-executive Deputy Chair.

These high-profile appointments signal the increasing importance of sustainable building practices in South Africa.

Currently serving as the Strategic Executive Director of City Sustainability at the City of Tshwane, she holds an MBA from the University of Pretoria’s Gordon Institute of Business Science (GIBS) and a Master’s degree in environment and development from the University of Sussex in the UK, a Postgraduate Diploma in environmental diplomacy from the University of Geneva, Switzerland and a first degree in environmental health from the Tshwane University of Technology.

Before her role of transforming Tshwane into the greenest and most sustainable city on the African continent, Modise was chief policy advisor for sustainable development at the SA Department of Environmental Affairs, where she spearheaded South Africa’s engagements in global sustainable development negotiations and the environment sector green economy response including the establishment and management of the national green fund.

Pienaar holds impeccable credentials for his new position having been appointed first as non-executive deputy chair of the GBCSA Board in April last year, and then as non-executive director of the World Green Building Council, representing Africa, three months later.

Faieda is responsible for strategic projects at Old Mutual Property. She has 30 years’ experience in property, ranging from property management, property asset management and people management. Prior to joining Old Mutual Property, she was a property manager at Fountainhead Property Trust and Allan Gray Property Trust.
DCS551Z Cordless Metal Cutter

The Makita DCS551Z has a maximum cutting capacity of 57.5mm when it comes to cutting round pipe, angle iron, channels, thin metal, rods as well as aluminium and will cut through in a single cut with ease.

This model has a brushless motor and is fitted with automatic speed control, which changes the cutting mode according to the load conditions for optimum operation.

When using DCS551Z for light duty applications the tool will use the high-speed rotation mode and for heavy-duty applications it will automatically select the high torque mode.

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Specifications:
- Blade diameter: 150mm
- Max cutting capacity: 57.5mm
- No load speed: 3,900 r/min
- Supplied with 150mm Mild Steel Blade (Part No. B-46296)

Blade Accessories for DCS551Z

T.C.T. Saw Blade (No Resharpen)
- Outer dia: 150mm, Bore: 20mm

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<td>B-47020</td>
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Our Cordless Circular Saw Models:

DSS610ZK
- Specifications:
  - Blade Diameter: 165mm • Bore Size: 20mm
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  - No Load Speed: 3,700 r/min
- * Standard with Blade
- Part No. A-85101

DHS680ZJ
- Specifications:
  - Blade Diameter: 165mm
  - Max. Cutting Capacity: At 0° 57mm, At 45° 41mm, At 50° 37mm
  - No Load Speed: 5,000 r/min
- * Standard with Blade
- Part No. A-85101

DHS710Z
- Specifications:
  - Blade Diameter: 190mm
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