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As another year draws to a close, *Sparks Electrical News* offers our readers the opportunity to start 2023 on a positive note. We have teamed up with South Africa's leading electrical companies who have donated a number of amazing prizes. Don't delay - entry is simple, so complete the form and stand a chance to win!

HOW TO ENTER

Entering the competition is simple:

1. Scan the QR code on this page to go straight to the competition entry form.
2. Log onto the Sparks website - www.sparkselectricalnewsmagazine.co.za and click on the competition banner at the top of the page
3. Email your name, company, postal address and contact number to sparks@crowm.co.za



DRAW

All entries received will go into a draw which will be conducted in January 2023. Winners will be notified by email and the names of the winners will be published in the February 2023 issue of *Sparks Electrical News*.

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Zest WEG delivers mobile switching station to Mozambique



Zest WEG has completed the delivery of a mobile switching station to Mozambique's national power utility EDM (Electricidade de Moçambique), further reinforcing its reputation as a supplier of cost-effective, custom-designed mobile power solutions.

The 33 kV switching station, complete with 36 kV rated switchgear, is housed within a purpose-built enclosure installed on a double-axle trailer and includes all protection requirements to allow for quick connection and safe operation at all times.

"Mozambique is regarded by Zest WEG as a key strategic market and we're therefore delighted to

have successfully completed this order," comments Sollie Herbst, senior manager, Energy Systems at Zest WEG. He adds that while Zest WEG does not have a branch in Mozambique, it has an established Value-Added Reseller in the country able to provide support – in conjunction with Zest WEG in South Africa – to customers in the country.

The switching station was designed and manufactured in South Africa by Zest WEG with the lead engineer on the project being Dumisani Dlamini, energy systems engineer within the Energy Systems division of the company. The specifications and end-user requirements to be

met were provided to Zest WEG by MESAT, a Mozambican engineering company acting on behalf of EDM.

Dlamini says that the main challenge on the project was to incorporate all the functionalities required by EDM into a single compact prefabricated solution while, at the same time, minimising the overall size and mass of the unit to allow it to move along public roads without any special permits being required.

In addition, it had to be able to interface with the most recently developed technology for supervision, control and protection and incorporate advanced safety interlocks, both mechanical and electrical. Secondary plant, such as protection relays and devices, was sourced to be in line with EDM's substation standards.

Dlamini points out that one of the advantages that Zest WEG has in designing projects of this nature is its ability to build its own enclosures. "We don't make use of standard containers and therefore are not limited by standard sizes," he says. "By undertaking our own fabrication, we can produce enclosures which can comfortably house all the components of the switching station without any need for compromises due to space restrictions."

Dlamini adds that the design adopted by Zest WEG simplifies on-site installation. "The unit is completely pre-tested, prefabricated and pre-wired. In essence, it's a 'plug-and-play' solution which can be rapidly deployed to wherever it is needed. There is no need for any support infrastructure on site, such as a specially prepared laydown area, and also no requirement for any craneage, that you would have with a skid-based solution. This means the switching station can become operational shortly after arriving on site."

Zest WEG is normally able to supply its mobile switching stations within 28 weeks of receiving an order but, in this case, was able to slightly better this time. "The design and fabrication proceeded very smoothly and we were able to deliver well within the promised timeframe," says Dlamini.

Commenting on the possible applications for the switching station, Herbst says that EDM stipulated that it should be a self-contained, multi-purpose unit able to accommodate a range of operational scenarios, including working in areas with limited infrastructure.

"It can be used in emergency applications where it replaces an existing switching station that might have failed or it can be used in a standby role where it assists with temporary 33 kV distribution," he says. "It's also ideal for routine maintenance projects, where it might replace – for example – a switching station that is temporarily taken off-line. It's also, of course, suitable for any project under construction which might need a temporary 33 kV network distribution. It's a simple operation for this unit to tap into an overhead line and feed power directly to the site."

The mobile system delivered to EDM follows hard on the heels of another recent notable success in Africa, which saw Zest WEG supplying a 50 MVA mobile sub-station, one of the largest ever built in South Africa, as well as a 33 kV mobile switching station, to Electricité de Guinée, the national electricity utility in the West African country of Guinea.

The scope of the turnkey project included three trailers with specialised equipment, one of them being a cable reel trailer with all power and control cabling needed to connect the mobile sub-station and the mobile switching station trailers into an integrated mobile energy system.

"The latest Mozambican order as well as the Guinean project highlight Zest WEG's ability to design and manufacture mobile solutions for almost any application, anywhere in Africa," says Herbst. "We believe that there is a significant and growing demand for solutions of this type given that the continent's electrical infrastructure is growing very rapidly. These contracts clearly underline our ability to meet this demand."

Enquiries: www.zestweg.com



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The Enel Green Power webpage dedicated to young people

Enel Green Power has launched Gigawhat?, a new section on its website specifically dedicated to Generation Z, with the goal of becoming a reference point for younger audiences.

Gigawhat? stems from the desire to raise awareness among younger generations of environmental sustainability issues. Its design, graphics and content aim to capture young people's attention and spark their passion for the challenges of the energy transition. The initiative maintains a direct, positive tone, with an extremely pragmatic approach that can also help decrease eco-anxiety.

The portal will also include a special section featuring "On the website, this is now: "Electric! The Future of Energy" a podcast series created in collaboration with activist and entrepreneur Francesca Cavallo, who co-authored the bestselling series "Good Night Stories for Rebel Girls". It is divided into six podcast episodes, tracing a journey across fascinating places where one of the most precious resources we have – energy – is produced.

"We truly believe that dialogue and engagement with young people is the key to accelerating the achievement of our sustainability goals. This is the time to build a collective, positive narrative about the energy transition, giving a leading role to new generations," declared Antonella Santilli, Head of Communications at Enel Green Power.

"I think we have to stop portraying the green transition as a form of punishment; it's crucial that we talk more about the aspects that make

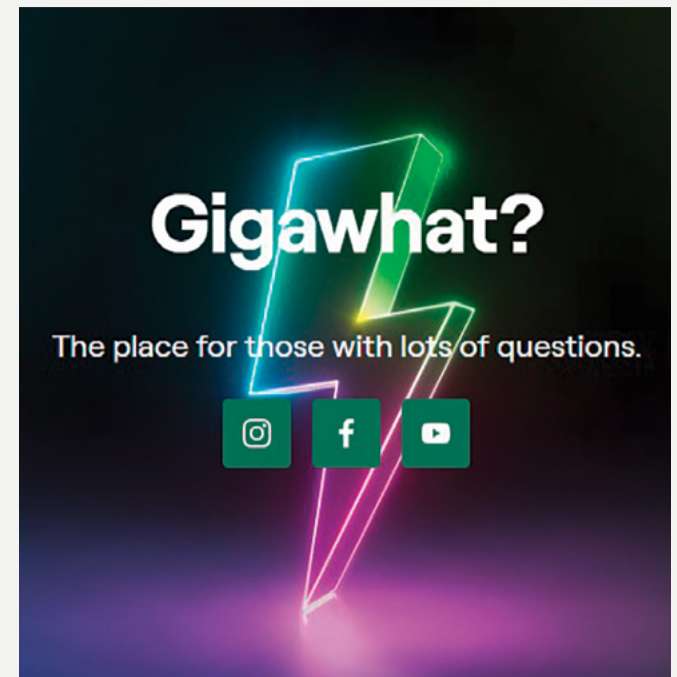
it the most ambitious and exciting challenge humanity has ever faced," commented Francesca Cavallo.

The podcast's episodes started publishing on October 20th on the Enel Green Power website and on all major streaming audio platforms, with versions in Italian, English and Spanish.

In addition to Francesca Cavallo, who lends her voice to the Italian version, Canadian inventor Ann Makosinski, who promotes STEM education for girls internationally and has been included in the Forbes 30 under 30 list, will be the voice of the English version, while Xóchitl Guadalupe Cruz, who designed and built a solar-powered water heater entirely from recycled materials at only 8-years-old, becoming the first girl to win the Women's Recognition Award from the Instituto de Ciencia Nuclear of the Universidad Nacional Autónoma de México, will be the voice of the Spanish version.

Enel Green Power®, within the Enel Group, develops and operates renewable energy plants worldwide and is present in Europe, the Americas, Africa, Asia and Oceania. A world leader in clean energy, with a total capacity of around 55 GW and a generation mix that includes wind, solar, geothermal, and hydroelectric power, as well as energy storage facilities, Enel Green Power is at the forefront of integrating innovative technologies into renewable energy plants.

Enquiries: www.enelgreenpower.com/learning-hub/gigawhat



Flat rate vs hourly – What's the best?

When it comes to your trade, you know the job inside and out, you're in high demand, and the jobs are rolling in. But knowing how to charge for your services can be a trickier task.

If you've just started your trade business, you'll know pricing is a key element of your business plan. Experienced tradespeople know that if you quote too much, you might miss out on future work. If you charge too little, you'll lose profit. The rate dilemma can also make sales forecasting or a break-even analysis slightly problematic.

It's a fine line and there's certainly no one-size-fits-all for every tradesperson. Regardless, we've weighed up the pros and cons of each option, so you can be sure you're charging sensibly for your services.

Benefits of charging an hourly rate

This is probably the most favoured option for tradespeople – you quote a price by the hour, and the final invoice is calculated when the job is complete.

Every minute counts: Trade jobs are often unpredictable – what you thought was going to be a simple one-hour job could easily turn into ten when you get started and realise there are further problems. But if you've quoted an hourly rate – no problem, you'll be paid for all your time spent on the job.

More room for change: There's a lot more flexibility or scope of work when you're being paid by the hour – not having to knuckle down on set costs. Plus, if you get halfway through a job and realise it needs to change direction – your pocket won't suffer because of it.

Freedom to take on more jobs: With an hourly rate, depending on how you organise your day, you might have time to fit in multiple small jobs. More jobs can mean a boost in income.

Keep your freedom: With an hourly rate, you can come and go more easily – freeing up time to take a call about a quote or visit another job site.

Downsides of charging an hourly rate

Less appeal to clients: Inconclusive prices could very well lead to less interest from customers, which could mean you struggle to secure work. It's reassuring for a client to know exactly how much something is going to cost – down to the final cent.

Benefits of charging a flat rate

This is a clean and easy way of quoting for your services – a single fee that covers a particular job – regardless of the time it takes to complete.

Predictability: When you charge a flat rate, you know exactly how much income to expect when the job's done. If you quote every job at a flat rate, you can accurately estimate your profit.

Secure more work: This option is appealing to customers, with no surprises for them in the final invoice. For this reason, you might secure more work if you offer a flat rate.

Larger profit: If you're charging a set fee for a job, it could take you 30 minutes or four hours. Knowing you won't be paid extra for any overtime, you or your staff might be more motivated to get the job done faster – meaning a larger profit and free time to take on more work.

Upfront payments: If customers know how much the job is going to cost, they may choose to pre-pay for your services. This will save you a huge amount of time and stress chasing wayward payments.

Downsides of charging a flat rate

Losing profit: If you accidentally undercharge, there's no going back once the quote has been sent. And if a job takes you much longer than you anticipated, you could lose potential earnings.

No wriggle room: Just as a job could take you longer than you estimated, it could also end up being much more complicated than you expected. If prob-

lems arise after clients have accepted a quote, they're unlikely to agree to change it – meaning you'll be faced with hours of extra work and no pay.

Pressure: With a set job rate, you might feel pressured to stay on site all day until the job's completed.

Hybrid rate

A hybrid rate is essentially a blend of hourly and fixed rates, adjusted to suit your business and circumstances. For example, you might charge a fixed rate for installing a new plug point – it's a job you've done a hundred times before and you know how long it should take you. But if the same client also needs a electrical repairs, that could take hours or even days – so you may price it by the hour.

Ample flexibility: A hybrid option offers ample flexibility and is a great solution to all the above issues. Having your entire business on the same pricing structure doesn't make a lot of sense when the scope of your work can vary so much. A hybrid approach allows you to price jobs according to whether they're more suited to fixed, hourly, or a mix of both rates.

A flat rate to start: Some tradespeople also use the hybrid method to quote a flat rate for a certain amount of hours – and anything above that goes hourly. If the client requests further work or for unforeseen reasons it ends up taking longer, the rate will go to hourly after the initial agreed upon hours is up.

So, what should you be paid for your trade?

If you can accurately estimate the hours needed for a job, then a fixed rate may work for you – you'll keep your client happy, you won't miss out on cash and you'll probably secure more work thanks to your reputation. But for unpredictable, complex or more labour-intensive jobs, an hourly rate will have your back. You'll be paid for all the time you work and you won't risk one hour of paid work turning into ten unpaid.

Many tradespeople have adopted the hybrid approach and offer a mix of both fixed and hourly rates. That way, they quote a fixed rate when they can confidently predict the duration of simpler jobs, and an hourly rate is agreed upon for the more complex jobs. It's the best of both worlds – and it keeps everyone happy.

Enquiries: www.tradifyhq.com



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What homeowners should know before investing in solar panels

By Otto Botha, Managing Director at Waco Engineering Services

As the South African government looks for solutions to the country's electricity crisis, significant emphasis has been placed on households and businesses investing in solar panels as a way of reducing the pressure on the national power grid. However, while the drive towards harnessing solar power should be supported, there are certain key regulatory and legislative considerations that homeowners must take into account before investing in solar panels, as running afoul of the law could prove to be a very costly exercise.

Firstly, homeowners should be aware that the installation of solar panels is governed by the National Building Regulations, Occupational Health and Safety (OHS) Act, and the Construction Regulations, which are three main pieces of legislation that are applicable to this process. Homeowners must understand that the installation of solar panels is deemed to be construction work, meaning that there are certain legal obligations on the contractor carrying out the work, as well as on the client – the homeowner – that must be adhered to.

As solar panels are typically installed on top of a roof, most of the installation work is undertaken at height, placing the onus on the homeowner to appoint a contractor that has the necessary competencies, training and resources to carry out this type of work safely.

Working at height

But working at height also means that the aspect of safety becomes a key consideration, with the OHS Act requiring people who work at height to be certified medically fit for this type of work. Additionally, the contractor must be able to prove that his workers have undergone the required training for working at heights and for installing solar panels, as well as ensure that safe access to the roof is provided, along with the required Personal Protective Equipment (PPE), such as safety harness attached to hook points, or lifelines.

Furthermore, homeowners should consider that roofs typically have no secure attachment points for workers to hook onto with their fall arrest equipment. This requires a temporary system to be installed, which must be done by a competent person – qualified engineer with adequate training and experience – who must design these hook-on points or lifelines. This would be termed as temporary works, typically done by engineers who assess and determine how attachment points can be installed.

More often than not, the installation of solar panels requires the erection of some form of scaffolding which triggers a few requirements in terms of the Construction Regulations, meaning that a temporary works designer is required to ensure that the scaffold is erected to standard, specifically when it is a special scaffold that

has to be designed, inspected, checked and signed off on for safe use.

Role of temporary works

The role of temporary works is to ensure that workers can get themselves and the equipment they are installing safely up and down the structure they are working on. This includes the erection of scaffolding compliant with Construction Regulations that must be checked, designed and signed off by a competent person. Ordinary scaffolds are deemed to satisfy standard, which means that they do not need an engineer to do a design or provide a drawing. However, when a scaffold is higher than 60m or equipment is used in unconventional ways, an engineer must design, do a drawing and sign off on the temporary structure.

While the regulations around solar panel installation may seem daunting, non-compliance could be costly. In terms of the OHS Act, it is a legal responsibility of every employer (homeowner) to ensure the Act is complied with by every person in their employ, meaning the homeowner must ensure the contractor and all employees are compliant with applicable legislation. Failure to do this means they could be liable for fines.

Currently, changes to the OHS Act are on the cards and will provide for fines of up to R5 million or five years in prison for various contraventions, as well as the issue



Otto Botha, Managing Director at Waco Engineering Services

ing of spot fines of R50 000 per contravention, applicable to both the client and contractor.

Homeowners are thus advised to use reputable contractors, who have been in business for at least two years and have a proven track record. It is important to ask for references and check that they are legitimate, and thus avoid expensive mistakes.

Enquiries: www.wacoengineering.co.za

New high-tech African facility for SEW-Eurodrive

SEW-Eurodrive South Africa, a specialist in drive and control technologies, moved into its new state-of-the-art 26 000m² headquarters complex in Aeroton, Johannesburg, earlier this year. The new complex more than triples the floor and factory space that was available at its previous premises.

Built and equipped at a cost of R200 million and modelled on SEW-Eurodrive's showcase factory in Graben-Neudorf in Germany, the facility – which accommodates approximately 150 employees – makes extensive use of the latest technologies to effectively network people, processes, services and data.

The investment reflects SEW-Eurodrive's confidence in the future of both South Africa and the African continent. The company points out that Africa is regarded as the world's next growth market. Home to 17 % of the global population in 2019, it is expected to account for 26 % by 2050, as well as an estimated US\$16,2 trillion of combined consumer and business spending.

Commenting on the investment, Raymond Obermeyer, Managing Director of SEW-Eurodrive South Africa, says: "This is a bold step that demonstrates our commitment to being part of solving South Africa's problems and developing the economies of countries across Africa."

SEW-Eurodrive currently services 23 countries throughout the African continent from South Africa. "With the implementation of the African Continental Free Trade Area (AfCFTA) protocol, which came into effect in early 2021, and a push to grow manufacturing on the continent, we are expecting African markets to account for around 50 % of our turnover within the next few years," says Obermeyer.

The new facility will play a pivotal role in allowing SEW-Eurodrive to service the burgeoning Africa market efficiently. It houses not only the group's African head office but also an assembly plant for industrial gears and electric drives, expanded central warehousing and repair facilities. It also encompasses assembly and repair of all VSDs, AGVs and Servo motor technology. SEW-Eurodrive also employs multiple mechanical, electrical and mechatronic engineers to further support technical customer queries.

In addition, it accommodates SEW-Eurodrive's unrivalled Drive Academy, which delivers product awareness and maintenance



training to customers. Online and virtual AR training and support is also now available, in direct support of SEW-Eurodrive's social development plans.

The expanded warehousing gives SEW-Eurodrive the ability to increase stock levels, a huge benefit given the problems currently affecting the global supply chain. It means the company's customers in Africa will be able to get orders – for new equipment or spares – fulfilled with minimal delay.

"The new facility allows us to service our customers more efficiently, reducing the high cost of unplanned downtime and allowing them to adhere to their scheduled maintenance programmes," Obermeyer states. "Ensuring our customers' continued productivity has been the key driver behind the development of our new premises."

Over a three to five-year period, SEW-Eurodrive will incorporate further 4IR technologies, including automated assembly machines and guided vehicles, into the Aeroton factory at a cost of an additional R200 million.

"We are working hard to shape the factory of tomorrow with system solutions for Industry 4.0 and a focus on raising productivity and implementing smart maintenance while, at the same time, providing ergonomic support for the people working in these facilities," notes Obermeyer.

SEW-Eurodrive has used its own technology to automate operations at the Aeroton facility, with the main production conveyor being based on the company's high-tech MOVI-C® all-in-one modular drive solution which is now being introduced to the African market. MOVI-C® had its official African launch at the recent Electra Mining Africa 2022 show in Johannesburg.

In essence, MOVI-C® is a suite of products



– which includes controllers (PLCs), variable speed drives, gear motors and servomotors – that automates drive applications, whether they be simple or very complex.

The installation – which has resulted in a 40% productivity gain – includes the Movigear® mechatronic drive system. The Movigear® units – which combine an energy-efficient IE5 motor, gear unit and corresponding drive electronics in a single housing – control and drive the production conveyor. The modular nature of the installation means it can easily be extended in the future should the need arise.

The assembly line for geared motors can accommodate 7 000 units per month while assembly of industrial gear (IG) units is currently being ramped up to between 100 to 140 IG units per month, doubling current capacity. New spray booths and automated oil filling stations have been installed to cater for these volumes.

All local assembly is conducted in accordance with SEW-Eurodrive's global quality standards, with the assembly of VSDs, servo motors and other sensitive equipment being conducted in an isolated clean area – with copper grounding and anti-static mats – of the facility. The assembly and logistics processes are also now incorporated into SEW-Eurodrive's SAP system, which gives better traceability and visibility of all orders as they move through assembly processes.

Enquiries: www.sew-eurodrive.co.za

Are consumers in safe hands?

By Juan Beyneveldt, Managing Director, Atom Electrical and ECA member

There are a few key factors to consider when choosing an electrical contractor to do work for you, whether it is at your house or in a business or industrial environment.

Electricians play a big part in today's life when it comes to property owners' safety and well-being. However, many property owners are unaware of the 'rules and regulations' that they need to know before they appoint an electrical contractor to do work for them. And, in most cases, they don't know that it is their legal responsibility to ensure they appoint a registered electrical contractor, who may also issue a certificate of compliance for the work undertaken.

Illegal

Employing an unregistered electrician is not only illegal, but it could also lead to trauma and major loss in the blink of the eye ... a burnt down house due to an electrical fault; the death of a child by electrical shock; a compensation claim from a worker who was injured on duty ... and it doesn't stop there. In recent times, insurance companies have put certain measures in place and will not cover certain electrical (and other) claims if certain criteria are not met.

And, if you used an unregistered electrical contractor, you may be found negligent.

The most important factor to consider before instructing any person who claims to be an electrical contractor to do any electrical work anywhere, is to ascertain whether that contractor is legally registered as an electrical contractor. It is also important to understand some of the legislation that compels you to use a registered electrical contractor, and what work the contractor may undertake according to the type of registration.

The law

Let's begin by answering the ques-



Juan Beyneveldt, Managing Director, Atom Electrical and ECA member.

tion, "What is an electrical installation?" As per the Electrical Installation Regulations (EIR) in the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), "electrical installation means any machinery, in or on any premises, used for the transmission of electricity from a point of control to a point of consumption anywhere on the premises, including any article forming part of such an electrical installation irrespective of whether or not it is part of the electrical circuit".

This includes photovoltaic (PV) systems, generator systems and battery back-up systems, which are seen as part of the electrical installation. "But excluding any machinery of the supplier related to the supply of electricity on the premises."

This refers to electricity meters, ripple relays, Eskom power plants or, in the case of farms, transformers. There are a few more exclusions that are not related to this article, which can be found in the above-mentioned regulations.

Accountability

The same regulations describe you – the user, lessor or lessee, as the case may be – as responsible for the electrical installation and therefore also accountable. This is the reason that it is of utmost importance that property owners (or users) ensure that only registered electrical con-



Voltex opens new hybrid store in Paarl

Voltex, South Africa's largest wholesaler and distributor of electrical and lighting related products, has embarked upon a drive to rebrand and, where necessary, relocate branches with the aim of improving existing customer relationships and drawing in new customers with a fresh and innovative shopping experience.

Voltex Paarl is the first new hybrid store in South Africa and the company has subsequently revamped two branches in Gauteng. Voltex supply the widest range of electrical, renewable and related products through its numerous revamped hybrid stores strategically located across Southern Africa accommodating everyone, from a contractor to the end user.

Customers will be exposed to a hands-on experience of state-of-the-art products assisted by the trained and qualified sales staff. "The product range has been carefully selected, particularly in the energy efficiency, renewable and lighting markets," says Mr Ahmed Baig, Managing Director of Voltex Wholesale. These areas are of particular focus right now as the world moves towards greener solutions.

That being said, the company remains invested in its current range of electrical and related products. The new store can be visited at 3 Kaplan, Charleston Hill, Paarl.

Voltex prides itself on being South Africa's lead-

ing electrical wholesaler for the finest electrical products and services. Founded in 1964 and still growing, its mission includes providing Southern Africa with the best supplies available both locally and internationally. Voltex have trusted, expert advice and solutions and an extensive product inventory consisting of both well-known house brands and leading international brands.

Its extensive offering includes solutions to all things relating to power generation, renewable energy and commercial and industrial lighting and a wide variety of other highly specialised and specific products and services.

Enquiries: www.voltex.co.za






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tractors work on the installation.

The EIR states: "6. (1) No person may do electrical installation work as an electrical contractor unless that person has been registered as an electrical contractor in terms of these Regulations." It also says that the electrical contractor should be a registered person or employ a registered person on a full-time basis.

Registered persons

A registered person is someone who is registered by the Department of Employment and Labour as:

- A Single-phase Tester
- An Installation Electrician, or
- A Master Installation Electrician

When you need electrical work done, knowing which electrician to use, based on the limitations according to their type of registration, is also important. Here is some guidance from Annexure M in SANS 10142-1:2021 Edition 3.1:

Before allowing any electrical contractor to do work at your premises, ask the contractor to provide you with a document from the Department of Employment and Labour that confirms his/her registration as an electrical contractor as well as the type of registration they have obtained. This document not only declares that the contractor is legally registered but also provides you with the information of when the registration expires and the identity of the registered person in that company.

The next thing you should ensure is that the registered person who signs the certificate of compliance for an electrical installation has personally inspected that installation. The electrical contractor cannot do an inspection on behalf of the person signing the certificate.

In these times of loadshedding, many people are considering installing a backup system whether it is a generator, an inverter with batteries, or solar panels, but before you allow any person to do an installation it is imperative to ask that person for proof that they're registered as an electrical contractor with the Department of Employment and Labour.

The regulations are in place to protect people and their homes.

Remember, it is your legal responsibility to ensure that you appoint a registered electrical contractor who may issue a certificate of compliance for the work undertaken. It is your responsibility to obtain this certificate and the contractors' responsibility to issue it.

Enquiries: juan@atom-electrical.co.za

MANUFACTURERS

ABB South Africa
Aurora Lighting Africa
Ausma
BEKA Schröder
Caco Trading
Eaton Electric
Electroweb
HellermannTyton
Giantlight
Genlux Lighting
Krilux
Ledvance
Legrand
Marechal Electric Africa
Matelec
Nordland Lighting
Shuttle Lighting
Signify
Spazio Lighting
Superlume
Visionware

DISTRIBUTORS

ACDC Dynamics
Aberdare Cables
ACTOM Electrical Products
ARB Electrical Wholesalers
Atlas Group
Aurora Lighting
Ausma
BEKA Schröder
Bellco
Citilec
Crabtree South Africa
Eagle Lighting
Eaton Electric
Electrahertz
ElectroMechanica
Electroweb
Eurolux
Genlux Lighting
HellermannTyton
Khanyisa
K. Light
Lamps Electrical Distributor
LS Lighting Structures
Lumax Lighting
Major Tech
Matelec
MCE Electric
Power Panels and Electrical
Radiant Group
Spazio Lighting
Superlume
Unique Lighting
Voltex
Voltex Lighting
Voltex Smart Solutions
Waco

CONTACTS

ABB South Africa
Claudeen Forbes
Aberdare Cables
Jyosthie Dhunes
ACDC Dynamics
Elmari Erasmus/Dirk Klynsmith
ACTOM Electrical Products
Millicent Mabote
ARB Electrical Wholesalers
Sales
Atlas Group
Annie Storer/Imran Gaffoor
Aurora Lighting Africa
Olivia Tait
Ausma
Ares
BEKA Schröder
Grant Combrink
Bellco
Shiraj Wentzel
Caco Trading
Christopher Hinckley
Citilec
Geoffrey Bower
Crabtree South Africa
Sales
Eagle Lighting
Robin Lewis
Eaton Electric
Marlene Coetzee
Eurolux
Sales
Electrahertz
Frank Proude (Pta) Peet Lourens (Jhb)
ElectraMechanica
Vinson Moore
Electroweb
Deon van Vuuren
Genlux Lighting
Glen Hill
Giantlight
Otto/Wolfgang Horlacher
HellermannTyton
Ingrid Nicolaus
Khanyisa
Dominic Kalil
K. Light
Eli Kalmi
Krilux
Krisem
Lamps Electrical Distributor
Shaun
Ledvance
Ledvance Head office
Legrand
Johan Bosch
LS Lighting Structures
Juanita Kanagan
Lumax Lighting
Sales
Major Tech
Werner Grobbelaar
Marechal Electric Africa
Sales
Matelec
Yann Leclézio
MCE Electric
Sales

CONTACTS

Nordland Lighting
Johann Lamprecht
Power Panels and Electrical
Freddie
Radiant Group
Sales
Shuttle Lighting
Tracey Smith
Signify
Nelisiwe Nkosi
Spazio Lighting
Sales
Superlume
Willie Garbers
Unique Lighting
Michael Smith
Visionware
Werner Benade
Voltex
Hugh Ward
Voltex Lighting
Mark Storer/Mark Rudman
Voltex Smart Solutions
Juanita Kanagan
Waco
Jaco Coetzee

INDOOR DECORATIVE LIGHTING

ACDC Dynamics
Full range of indoor decorative lighting: LED, LED glare-reducing and standard CFL options – downlights, chandeliers, wall mounts, spotlights, LED strip lights, wall washer LEDs, stainless steel light fittings
ACTOM Electrical Products
Distributors of Rabro brand imported and local manufactured product
ARB Electrical Wholesalers
Full range of indoor decorative lighting
Atlas Group
Distributor of a wide variety of reputable brands, designs and specifications e.g. energy saving and LED
Aurora Lighting Africa
Aurora Lighting and Enlite Lighting indoor decorative lighting
Ausma
Full range of indoor decorative lighting
BEKA Schröder
Full range of indoor decorative lighting luminaires
Bellco
Distributor of a wide variety of reputable brands, designs and specifications e.g. energy saving and LED
Caco Trading
Full range of indoor decorative lighting
Citilec
Full range of indoor decorative lighting
Crabtree South Africa
Acrylic diffuser with conical light control prisms (single; double – new Econo narrow body; and wide body decorative)
Eagle Lighting
Full range of indoor decorative lighting
Electrahertz
Full range of indoor decorative lighting
Electroweb
Full range of indoor decorative lighting
Eurolux
Full range of indoor decorative lighting
Genlux Lighting
Full range of indoor decorative lighting
Giantlight
Full range of indoor decorative lighting
HellermannTyton
Straight-through and branch gel cable joints with connectors (Relight and Relifix) and two-component gel (Religel)
Khanyisa
Full range of indoor decorative lighting
K. Light
Full range of indoor decorative lighting
Krilux
Extensive range of LED filament lamps available (G125, G95, ST64, PEAR, A60, C37, G45)
Lamps Electrical Distributor
Full range of indoor decorative lighting
Ledvance
Full range of indoor decorative lighting
Lumax Lighting
Full range of indoor decorative lighting
Major Tech
Full range of LED wall lights, picture and mirror lights, step lights and ceiling lights ideal for office, home, hotels and general lighting applications
MCE Electric
O-lite LED candle bulbs, globes and lamps; O-Lite LED Cyclops panel lights; O-Lite LED downlights with built-in drivers
Power Panels and Electrical
Full range of indoor decorative lighting
Radiant Group
Full range of indoor decorative lighting
Shuttle Lighting
Full range of indoor decorative lighting
Spazio Lighting
Full range of indoor decorative lighting
Superlume
A new Elor Decorative Indoor lighting range and new Bathroom lighting range.
Unique Lighting
Full range of indoor decorative lighting
Visionware
Full range of indoor decorative lighting
Voltex
Distributor of a wide variety of reputable brands, designs and specifications e.g. energy saving and LED
Voltex Lighting
Distributor of a wide variety of reputable brands, designs and specifications e.g. energy saving and LED
Waco
Distributor of a wide variety of reputable brands, designs and specifications, for example, energy saving and LED

OUTDOOR DECORATIVE LIGHTING

ACDC Dynamics
Wide range of outdoor decorative lighting: bulkheads, wall mounts, deck and floor lighting, floodlights, lanterns, garden lights, solar garden lights, security lights, decorative bollards
ACTOM Electrical Products
Distributors of Genlux brand imported and local manufactured product
ARB Electrical Wholesalers
Full range of outdoor decorative lighting
Atlas Group
Solar street lights, flood lights, bulkheads, sensor lights with conventional control gears; energy efficient and LED
Aurora Lighting Africa
Full range of outdoor decorative lighting
Ausma
Full range of outdoor decorative lighting
BEKA Schröder
Full range of outdoor decorative lighting
Bellco
Solar street lights, flood lights, bulkheads, sensor lights with conventional control gears; energy efficient and LED
Caco Trading
Full range of outdoor decorative lighting
Citilec
Full range of outdoor decorative lighting

OUTDOOR DECORATIVE LIGHTING

Crabtree South Africa
Totally enclosed, high impact, corrosion resistant fluorescent luminaires
Eagle Lighting
Full range of outdoor decorative lighting
Electrahertz
Full range of outdoor decorative lighting
Electroweb
Full range of outdoor decorative lighting
Eurolux
Full range of outdoor decorative lighting
Genlux Lighting
Outdoor lights; bulkheads; flood and security lights; solar lights
Giantlight
Full range of outdoor decorative lighting
HellermannTyton
Straight-through and branch gel cable joints with connectors (Relight and Relifix) and two-component gel (Religel)
Khanyisa
Full range of outdoor decorative lighting
K. Light
Full range of outdoor decorative lighting
Krilux
PAR38 LED colour lamps available (red, blue, green, yellow)
Lamps Electrical Distributor
Full range of outdoor decorative lighting
Ledvance
Full range of outdoor decorative lighting
Legrand
Weatherproof and vandal resistant bulkhead lights
Major Tech
Full range of LED garden lights, wall lights ideal for office, home and hotels
Matelec
Centurion Bulkheads (LED, CFL); Mirage Bulkheads (LED, CFL); PAR 38 (single and double)
MCE Electric
O-lite outdoor LED aluminium fittings; O-lite outdoor E27 aluminium fittings; O-lite outdoor recessed step light; O-Lite bulkhead fittings
Nordland Lighting
Full range of outdoor decorative lighting
Power Panels and Electrical
Full range of outdoor decorative lighting
Radiant Group
Full range of outdoor decorative lighting
Signify
Full range street lighting with connectivity (Philips/Interact)
Spazio Lighting
Full range of outdoor decorative lighting
Superlume
A wide range of decorative outdoor lighting.
Unique Lighting
Full range of outdoor decorative lighting
Visionware
Full range of outdoor decorative lighting
Voltex
Solar street lights, flood lights, bulkheads, sensor lights with conventional control gears; energy efficient and LED
Voltex Lighting
Solar street lights, flood lights, bulkheads, sensor lights with conventional control gears; energy efficient and LED
Waco
Solar street lights, flood lights, bulkheads, sensor lights with conventional control gears; energy efficient and LED

EMERGENCY LIGHTING

ABB South Africa
Full range of emergency lighting
ACDC Dynamics
Full range of emergency lighting: wall mount, double-sided, legends, bulkhead and Eco Lights ranging from IP42 to IP65
ARB Electrical Wholesalers
Full range of emergency lighting
Atlas Group
Distributors of Voltex lighting; emergency and other signs; emergency control gear for fluorescent lights as specified in the OHS Act
Aurora Lighting Africa
Full range of emergency lighting
Ausma
Full range of emergency lighting
BEKA Schröder
Full range of emergency lighting
Bellco
Distributors of Voltex lighting; emergency and other signs; emergency control gear for fluorescent lights as specified in the OHS Act
Citilec
Full range of emergency lighting
Eagle Lighting
Full range of emergency lighting
Eaton Electric
Full range of emergency lighting
Electrahertz
Full range of emergency lighting
Electroweb
Full range of emergency lighting
Eurolux
Full range of emergency lighting
Genlux Lighting
Full range of emergency lighting
Giantlight
Full range of emergency lighting
HellermannTyton
Adjustable LED Torch LED (HEADLIGHTPRO)
Khanyisa
Full range of emergency lighting
Legrand
Full range of emergency lighting units ranging from fluorescent to LED including maintained and non-maintained
Major Tech
Full range of portable lighting – in LED and fluorescent – ideal for power outages, camping, fishing, hiking, hotel, office and warehouse applications
Nordland Lighting
Full range of emergency lighting
Power Panels and Electrical
Full range of emergency lighting
Spazio Lighting
Full range of emergency lighting
Superlume
A wide range of emergency lighting
Unique Lighting
Full range of emergency lighting
Visionware
Full range of emergency lighting
Voltex
Distributors of Voltex lighting; emergency and other signs; emergency control gear for fluorescent lights as specified in the OHS Act
Voltex Lighting
Distributors of Voltex lighting; emergency and other signs; emergency control gear for fluorescent lights as specified in the OHS Act
Waco
Distributors of Voltex lighting; emergency and other signs; emergency control gear for fluorescent lights as specified in the OHS Act

FLAMEPROOF/HAZARDOUS AREA LIGHTING

ACDC Dynamics
Full range of flameproof/hazardous area lighting: visual alarms and beacons
ARB Electrical Wholesalers
Full range of flameproof/hazardous area lighting

FLAMEPROOF/HAZARDOUS AREA LIGHTING

Atlas Group
Distributors of Zone 1, 2 and 22 specialised lighting for indoor and outdoor
Aurora Lighting Africa
Full range of flameproof/hazardous area lighting
BEKA Schröder
Full range of flameproof/hazardous area lighting
Bellco
Distributors of Zone 1, 2 and 22 specialised lighting for indoor and outdoor
Citilec
Full range of flameproof/hazardous area lighting
Eagle Lighting
Full range of flameproof/hazardous area lighting
Eaton Electric
Full range of flameproof/hazardous area lighting
Electrahertz
Full range of flameproof/hazardous area lighting
Eurolux
Limited range of flameproof/hazardous area lighting
Genlux Lighting
Full range of flameproof/hazardous area lighting
Khanyisa
Full range of flameproof/hazardous area lighting
Lamps Electrical Distributor
Full range of flameproof/hazardous area lighting
Marechal Electric Africa
TECHNOR ITALSMEA: Full Range of Ex/ ATEX: Fluorescent, LED, Wellglass and Floodlights
Matelec
Norland agent for Western Cape
MCE Electric
O-lite LED floodlights
Nordland Lighting
Full range of flameproof/hazardous area lighting
Power Panels and Electrical
Full range of flameproof/hazardous area lighting
Superlume
A wide range of zone rated lighting fixtures
Unique Lighting
Full range of flameproof/hazardous area lighting
Visionware
Full range of flameproof/hazardous area lighting
Voltex
Distributors of Zone 1, 2 and 22 specialised lighting for indoor and outdoor
Voltex Lighting
Distributors of Zone 1, 2 and 22 specialised lighting for indoor and outdoor

ENTERTAINMENT LIGHTING

ACDC Dynamics
Full range of entertainment lighting: flexible and rigid LED strip lighting, LED bar lights (IP65), LED border lights (IP65), disco lights, stage flood lights, lasers and mini laser lights, colour changing LED strip lights, high power LED lights and various Christmas/festive lighting
ACTOM Electrical Products
Distributors of Opple and OSRAM brand entertainment lighting
ARB Electrical Wholesalers
Full range of entertainment lighting
Atlas Group
Available on request, e.g. spotlights, follow spots and strobe lights
Aurora Lighting Africa
Aurora Lighting and Enlite Lighting entertainment lighting
Bellco
Available on request, e.g. spotlights, follow spots and strobe lights
Eagle Lighting
Full range of entertainment lighting
Electrahertz
Full range of entertainment lighting
Eurolux
Full range of entertainment lighting
Genlux Lighting
Full range of entertainment lighting
Giantlight
Full range of entertainment lighting
HellermannTyton
Straight-through and branch gel cable joints with connectors (Relight and Relifix) and two-component gel (Religel)
Khanyisa
Full range of entertainment lighting
MCE Electric
O-lite LED strip and rope lights; O-lite LED plinth, cabinet and reading lights
Power Panels and Electrical
Full range of entertainment lighting
Radiant Group
Full range of entertainment lighting
Shuttle Lighting
Full range of entertainment lighting
Voltex
Available on request, e.g. spotlights, follow spots and strobe lights

STREET LIGHTING

ACDC Dynamics
Full range of street lighting: solar lights, LED lights, traffic lights, high power LED street lights (IP65), high power single LED chip lights in die-cast aluminium and Technopolymer
ACTOM Electrical Products
Distributors of Genlux brand imported and local manufactured product
ARB Electrical Wholesalers
Full range of street lighting luminaires
Atlas Group
Masts and poles available on request; solar street lights; floodlights; bulkheads; sensor lights with conventional control gear; energy efficient and LED
BEKA Schröder
Full range of street lighting luminaires
Bellco
Masts and poles available on request; solar street lights; floodlights; bulkheads; sensor lights with conventional control gear; energy efficient and LED
Citilec
Full range of street lighting
Eagle Lighting
Full range of street lighting
Eaton Electric
Full range of street lighting
Electrahertz
Full range of street lighting
Electroweb
Full range of street lighting
Eurolux
Limited range of street lighting
Genlux Lighting
Full range of street lighting
Giantlight
Full range of street lighting
Khanyisa
Full range of street lighting
Krilux
Full range of HID lamps available (metal halide, HPS, mercury vapour, blended)
LS Lighting Structures
Masts and poles available on request; solar street lights; floodlights; bulkheads; sensor lights with conventional control gear; energy efficient and LED
Lumax Lighting
Full range of street lighting luminaires
Matelec
Nema Photocell
Nordland Lighting
Full range of street lighting



STREET LIGHTING

Power Panels and Electrical
Full range of street lighting

Superlume
A wide range of street lighting options from HID to LED

Unique Lighting
Full range of street lighting

Visionware
Full range of street lighting

Voltex
Full range of street lighting luminaires

Voltex Smart Solutions
Masts and poles available on request; solar street lights; floodlights; bulkheads; sensor lights with conventional control gear, energy efficient and LED

INDUSTRIAL LIGHTING

ACDC Dynamics
Full range of industrial lighting: IP65 highbays, lowbays, bulkheads in aluminium and acrylic, surface-mounted and recessed fluorescent fittings, downlighting

ACTOM Electrical Products
Distributors of imported and local manufactured highbays, lowbays, bulkheads

ARB Electrical Wholesalers
Full range of industrial lighting

Atlas Group
Complete range available; bulkheads, floodlights and weatherproof; energy efficient high bays and low bays

Aurora Lighting Africa
Aurora Lighting and Enlite Lighting industrial lighting

Ausma
Full range of industrial lighting

BEKA Schröder
Full range of industrial lighting luminaires

Bellco
Full range of industrial lighting luminaires

Caco Trading
Full range of industrial lighting

Citilec
Full range of industrial lighting

Crabtree South Africa
Hi-bay luminaires

Denver Technical Products
Mains fail safety lighting

Eagle Lighting
Full range of industrial lighting

Eaton Electric
Full range of industrial lighting

Electrahertz
Full range of industrial lighting

Electroweb
Full range of industrial lighting

ElectroMechanica
IP65 4 ft Damp Proof and IP65 High Bay

Osram
Ledvance products.

Eurolux
Full range of industrial lighting

Genlux Lighting
Full range of industrial lighting

Giantlight
Full range of industrial lighting

HellermannTyton
Straight-through and branch gel cable joints with connectors (Relight and Relifix) and two-component gel (Religel)

Khanyisa
Full range of industrial lighting

Krilux
Full range of HID lamps available (metal halide, HPS, mercury vapour, blended)

Ledvance
Full range of industrial lighting

Legrand
Weatherproof bulkhead lights as well as vandal-resistant units

Lumax Lighting
Full range of industrial lighting

Major Tech
Range of high power LED floodlights

Matelec
Zodion Photocell Nema

MCE Electric
O-lite LED floodlights; O-lite LED panel lights; O-lite LED tubes and fittings

Nordland Lighting
Full range of industrial lighting luminaires

Power Panels and Electrical
Full range of industrial lighting luminaires

Radiant Group
Full range of industrial lighting luminaires

Shuttle Lighting
Full range of industrial lighting luminaires

Signify
Full range lighting with connectivity

Spazio Lighting
Full range of industrial lighting

Superlume
A wide range of industrial lighting options including LED, HID and fluorescent

Unique Lighting
Full range of industrial lighting luminaires

Visionware
Full range of industrial lighting luminaires

Voltex
Complete range available; bulkheads, floodlights and weatherproof; energy efficient high bays and low bays

Voltex Lighting
Complete range available; bulkheads, floodlights and weatherproof; energy efficient high bays and low bays

OFFICE LIGHTING

Aberdare Cables
Surface decorative fittings – switch start and electronic; recessed – prismatic and low brightness – switch start and electronic

ACDC Dynamics
Full range of office lighting: CFL and LED and high power LED downlights, surface and recess wall lighting; bulkheads, T5 and T8 linear lights, bay lights, glare reducing LED lamps

ACTOM Electrical Products
Distributors of imported and local manufactured downlighters, fluorescent

ARB Electrical Wholesalers
Full range of office lighting luminaires

Atlas Group
Recessed and surface lighting for all applications; energy efficient and LED light sources

Aurora Lighting Africa
Aurora Lighting and Enlite Lighting office lighting

Ausma
Full range of office lighting

BEKA Schröder
Full range of office lighting luminaires

Bellco
Recessed and surface lighting for all applications; energy efficient and LED light sources

Caco Trading
Full range of office lighting

Citilec
Full range of office lighting

Eagle Lighting
Full range of office lighting

Eaton Electric
Full range of office lighting

OFFICE LIGHTING

Electrahertz
Full range of office lighting

ElectroMechanica
Slim LED Panel 600 x 600 – 15 W Recessed Downlights. Osram Ledvance products.

Eurolux
Full range of office lighting

Genlux Lighting
Full range of office lighting

Giantlight
Full range of office lighting

HellermannTyton
Straight-through and branch gel cable joints with connectors (Relight and Relifix) and two-component gel (Religel)

Khanyisa
Full range of office lighting

K. Light
Full range of office lighting

Krilux
Full range of LED lamps available (plastic+alu, LED filaments)

Lamps Electrical Distributor
Full range of office lighting

Ledvance
Full range of office lighting

Lumax Lighting
Full range of office lighting

Major Tech
Wide range of energy saving LED lighting products

MCE Electric
O-lite LED floodlights; O-lite LED panel lights; O-lite LED tubes and fittings

Power Panels and Electrical
Full range of office lighting

Radiant Group
Full range of office lighting luminaires

Shuttle Lighting
Full range of office lighting

Signify
Full range lighting with connectivity (Philips/Interact)

Spazio Lighting
Full range of office lighting

Superlume
A wide range of office lighting solutions, including a new 'Lighting Solutions for Business Parks' application on our website

Unique Lighting
Full range of office lighting

Visionware
Full range of office lighting

Voltex
Recessed and surface lighting for all applications; energy efficient and LED light sources

Voltex Lighting
Recessed and surface lighting for all applications; energy efficient and LED light sources

Waco
Recessed and surface lighting for all applications; energy efficient and LED light sources

RETAIL LIGHTING

ACDC Dynamics
Full range of retail lighting: downlights, LED flexible and rigid strip lighting, LED track lighting, under-counter LED fittings, LED single modules, light box high power LEDs, LED neon flex lights

ACTOM Electrical Products
Distributors of Oplee LED lighting solutions

ARB Electrical Wholesalers
Full range of retail lighting

Atlas Group
Full range available; troffer fittings; track lights; downlights and spots

Aurora Lighting Africa
Aurora Lighting Africa retail lighting

Ausma
Full range of retail lighting

BEKA Schröder
Full range of retail lighting luminaires

Bellco
Full range available; troffer fittings; track lights; downlights and spots

Caco Trading
Full range of retail lighting

Citilec
Full range of retail lighting

Eagle Lighting
Full range of retail lighting

Eaton Electric
Full range of retail lighting

Electrahertz
Full range of retail lighting

Electroweb
Full range of retail lighting

Eurolux
Full range of retail lighting

Genlux Lighting
Full range of retail lighting luminaires

Giantlight
Full range of retail lighting

Khanyisa
Full range of retail lighting luminaires

K. Light
Full range of retail lighting

Lamps Electrical Distributor
Full range of retail lighting

Ledvance
Full range of retail lighting

Lumax Lighting
Full range of retail lighting

Major Tech
Wide range of LED lighting to meet retail applications

Matelec
Gladiator LED utility light (12 W)

MCE Electric
O-lite LED floodlights; O-lite LED panel lights; O-lite LED tubes and fittings

Power Panels and Electrical
Full range of retail lighting

Radiant Group
Full range of retail lighting

Shuttle Lighting
Full range of retail lighting

Signify
Focused range with connectivity (Interact)

Spazio Lighting
Full range of retail lighting

Superlume
Full range of retail lighting

Unique Lighting
Full range of retail lighting

Visionware
Full range of retail lighting

Voltex
Full range available; troffer fittings; track lights; downlights and spots

Voltex Lighting
Full range available; troffer fittings; track lights; downlights and spots

Waco
Full range available; troffer fittings; track lights; downlights and spots

STADIUM LIGHTING

ACDC Dynamics
Full range of stadium lighting, including Gewiss Horus and Titano floodlights

ACTOM Electrical Products
Distributors of imported and local manufactured product

ARB Electrical Wholesalers
Full range of stadium lighting

Atlas Group
Floodlights; masts; poles for mounting

Aurora Lighting Africa
Full range of stadium lighting

BEKA Schröder
Full range of stadium lighting luminaires

Bellco
Floodlights; masts; poles for mounting

Crabtree South Africa
All-purpose energy saving floodlights

Eagle Lighting
Full range of stadium lighting

Eaton Electric
Full range of stadium lighting

Electrahertz
Full range of stadium lighting

Electroweb
Full range of stadium lighting

Eurolux
Full range of stadium lighting

Genlux Lighting
Full range of stadium lighting

Giantlight
Full range of stadium lighting

Khanyisa
Full range of stadium lighting

Krilux
Full range of HID lamps available (metal halide, HPS, mercury vapour, blended)

Lamps Electrical Distributor
Full range of stadium lighting

LS Lighting Structures
Floodlights; masts; poles for mounting

Lumax Lighting
Full range of stadium lighting

Major Tech
Range of high power LED floodlights

Nordland Lighting
Full range of stadium lighting

Power Panels and Electrical
Full range of stadium lighting

Signify
Full range lighting with connectivity

Superlume
A range of stadium floodlights

Unique Lighting
Full range of stadium lighting

Visionware
Full range of stadium lighting

Voltex
Floodlights; masts; poles for mounting

EXHIBITION LIGHTING

ACDC Dynamics
ACDC supports exhibition stand builders with a wide range of lighting, spots, downlighting and floodlights

ACTOM Electrical Products
Distributors of LED lighting solutions

ARB Electrical Wholesalers
Full range of exhibition lighting

Atlas Group
Available on request to customer specifications

Aurora Lighting Africa
Full range of exhibition lighting

Citilec
Full range of exhibition lighting

Eagle Lighting
Full range of exhibition lighting

Eaton Electric
Full range of exhibition lighting

Electrahertz
Full range of exhibition lighting

Electroweb
Full range of exhibition lighting

Eurolux
Full range of exhibition lighting

Genlux Lighting
Full range of exhibition lighting

Khanyisa
Full range of exhibition lighting

Major Tech
Wide range of LED lighting from spotlights, downlighting and floodlights

MCE Electric
O-lite LED floodlights; O-lite LED panel lights; O-lite LED tubes and fittings; O-lite LED downlights; O-lite plinth and cabinet lights

Power Panels and Electrical
Full range of exhibition lighting

Radiant Group
Full range of exhibition lighting

SMART LIGHTING

Aurora Lighting Africa
Full range of smart lighting

BEKA Schröder
Full range of smart lighting

Eagle Lighting
Full range of smart lighting

Electrahertz
Full range of smart lighting

Electroweb
Full range of smart lighting

Eurolux
Limited range of smart lighting

Giantlight
Full range of smart lighting

HellermannTyton
Lux meters: T630 – digital lux meter (0-200 000 lux, data hold) T8000- lux meter (LCD display, auto power off)

Khanyisa
Full range of smart lighting

Krilux
A60 and GU10 with built-in day/night sensor function

Matelec
Dimmable 12 W LED bulkhead

Power Panels and Electrical
Full range of smart lighting

Signify
Consumer and professional full range lighting

Superlume
New range of Smart WiFi switches



+27 (0)11 874 7600



your electrical connection®

+27 (0)11 864 5255



+27 (0)11 683 0641



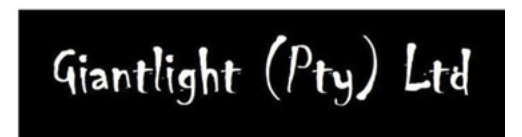
+27 (0)11 879 6600



+27 (0)11 844 8900



+27 (0)21 511 2640



+27 (0)11 704 1450

Black is the new in

Legrand's range of chic Ysalis switches and sockets - known for stylish aesthetics and pristine quality - is now available in black.

Ysalis wiring devices were launched locally in 2017, to meet growing demand for sophisticated, yet affordable fittings, with modern, safe and reliable control features.

These trendy fittings were previously available in white and champagne, but to keep abreast with every interior decorator's dream, Legrand has just launched Ysalis devices in black, to perfectly suit the latest décor trends.

It's no rumour that black is the new wow. According to Legrand designers, black isn't only spot-on for that special little evening dress, sports car or bow tie - black electrical fittings go a long way to transforming the ambience of homes, offices and hospitality projects.

For those in the know, black is classy, elegant and timeless. But not everything in life is black or white - Ysalis still also comes in champagne. It's the charm of these carefully designed slim, curvy shaped 9mm profile plates and large rockers, that not only enhance the décor of any room, but also provide easy and convenient control of functions like lighting, fans and the television. These plates can also be fitted with fluorescent indicators on the switches for improved comfort and safety in the dark.

Users can choose different kinds of functionalities, including power sockets (RSA current standard and new standard), data, television and USB. The Ysalis range can be also perfectly adapted to Legrand trunking systems.

A big bonus is that Ysalis is suitable for new and existing installations. The modular design allows any configuration to be easily adapted, simply by changing a connection function or the colour of the plate, at any time. With this system, there is no damage to the wall to increase, remove or change the number of lighting points or connections - the same box and support frames are used to accommodate all modifications.

The Ysalis range, with compact mechanisms, also makes instal-

lation quick and easy for electrical installers, because there is more space in the back box for easy wiring. Data sockets are fitted with tool-less connectors, eliminating the need for punch down tools.

Legrand honours its commitment to continually meeting local demand, through the ongoing launch of new products, in line with current global trends. The company has made a substantial investment in research, development and design of Ysalis, to ensure all products comply with the necessary standards and regulations.

Ysalis is available throughout the country from Legrand and its extensive distributor network.

Enquiries: legrand.south-africa@legrand.co.za



The ideal position switch for rough environments

Electrical safety device specialists, Bernstein, have released their new standard position and safety switch, the IN73. It features a modular, plastic enclosure with a wide range of metal actuators, ideal in mechanical and engineering applications where the operating environment can be somewhat robust.

The IN73 boasts the possibility of four contacts in the switch insert in various combinations. The modular design allows for an easy way to change the actuator which in turn allows for a greater variety of applications, from monitoring doors, hoods and flaps to detecting the position of moving machine parts.

Bernstein's IN73 position switch is cost effective and highly reliable at low currents. The space-saving enclosure and high protection class are ideal for an installation where a flat design is required, such as the monitoring of covers, inspection doors and outdoor applications.

- Application examples include
- Position monitoring of moving parts.
- Object detection in conveying technology.

- End position control of components.
- Position monitoring on rolling doors.
- Monitoring of sliding doors.



Finally, there is a metal version of the IN73 which has been designed for use in very rough environments. The modular, robust metal enclosure of the MN78 comes with a wide range of Metalast actuators for use outdoors, or for high mechanical loads.

For more on this latest offering from Bernstein, contact the Johannesburg-based sole distributor Anglo Allied Engineering.

Enquiries: info@angloallied.co.za

pleted before 2018. Currently, regulations require that the ZA Plug must be used in new buildings and on appliances. However, and this is some good news, South Africa's wiring code was amended in 2018 and now stipulates that when sockets are replaced due to failure or renovation, it must contain at least one ZA Plug.

Schneider Electric have made a strong case for the ZA Plug, but in the real world why should you switch over and quicker adoption encouraged? For one, the old three-pin plug sockets which we've been using for decades; in fact, South Africa adopted these plugs, known as the SANS164-1, from the British in the 1950s, can't keep up with various two-pin plugs requirements such as cell phone chargers. This means South African are using more adapters, increasing the risk of fires, short circuiting, and malfunction of appliances.

Also, South Africa has an on/off switch that comes with the sockets and has thankfully been standard in our homes for years. However, design of the old three-pin plug doesn't lend itself to safe handling, if one simply pulls out the plug (from the socket) without first switching it off, you run the risk of touching the live prong and subsequent injury.

At Schneider Electric our Iconic, Combo socket-outlet and the Quad socket is a prime example of the benefits of using the ZA Plug design. It features two sockets encapsulated in a great design that is not safer and easier to use but also compliments building aesthetics.

Enquiries: www.se.com

Counterfeit circuit breakers

There is an issue worldwide with both product copies and counterfeit products, and circuit breakers are not immune to this trend. While some products could even be tolerated as a copy, circuit breakers and similar products are safety critical items and therefore any non-performance or sub-standard performance is not acceptable.

The writer has had in-depth exposure to copies and counterfeit units and can offer some preventative measures to ensure that you have the lowest risk in procuring circuit breakers which, are in fact true manufacturers products and not counterfeits.

It can also be stated that this process occurs worldwide and no popular brand will be excluded. Mostly the well known brands are just as likely to be counterfeited as people identify with the brand as a 'good, reliable product'.

Counterfeit units are those that are made to look visually just like the copied product, down to the logo/brand. Generally, these types are where the most effort is taken so they are the best match visually. Pricing must be so that you believe you are getting a bargain for your buck, so to speak. This pricing can be from a low differential to quite a large, perceived, bargain. Every effort will be taken in the visual department to make sure the counterfeit units appear above board.

Generally, these types of products can good enough so as to fool even the most observant of customers, even manufacturing staff and suppliers. Even if poor in some respects, as soon as these are indicated as trap points, the moment they are identified, the counterfeiters make changes so that they are not identifiable going forward. Manufacturers will therefore never publish a comprehensive list of every detection point for obvious reasons.

So, whilst to the eye, and even to a point, the functioning, the counterfeit can be pretty much on par, yet the whole reason for the counterfeit is to part with as much money as possible but reduce the actual product cost far below the original product costs. The product performance and actual circuit breaker operation will be diminished as the origination factory is not a specialist circuit breaker plant.

Copies, on the other hand, are generally made far more substandard and, while to the trained eye they are not true to the original brand, others may still believe they are alternative brands based on the popular original/s. Certainly, some products may well exit from a circuit breaker plant where either the complete product is copied from an original brand, or that substitute the internals where only the outer shape/form is copied. These suppliers typically offer an alternative which is visually similar.

Some factories make a legitimate product but are quickly open to offer the client another brand in the customer given name. The manufacturer is trying to up his output with cost saving options, but with a few brand changes.

Some of the short cuts taken to drastically reduce costs

The writer has seen and experienced many variations and copies over a lifetime in the industry. Often the first inclination of a developing problem is when a customer has experienced a major event. Typically, a circuit breaker has been replaced and now the complete DB has burnt out, narrowly avoiding a house fire or other tragic event. All this to simply to save a few Rands in product cost.

As a result of this, the reputation of the contractor may be called into question. Although no actual deaths have been indicated to date, there have been some very narrow escapes in these matters. Examples of short cuts include:

- Omitting components which are not used during normal use and are not detected by switching. Arc quenching components being left out, metal plates plastic holders and anti-flame plastics.
- Risk: failure to extinguish any major arcs/fire source.
- Substitution of plastic housing. Using cheaper grades, non-flame retardant or UV stable.
- Risk: fire source.
- Reduction in current path materials, reducing thickness of copper components.
- Risk: units running extra hot, fire source, plastic simply decays with time.
- Reduction in metal components sizes/plating.
- Simply reducing the metal content to achieve a saving, removing the internal component plating. Poor reverse engineering copies.
- Risks: rusting, shorter product life, damage over time, non-operation of circuit breaker when needed.
- Comparison tests for weight could show up to a 25% variation to original units.
- Plastics that are substituted can be quite colour varied.
- Some care needed as there may be variation by the original manufacturer if colour mixes are swapped.
- Risks: base materials are important.

How to prevent purchasing suspect products

The saying, 'an ounce of prevention is worth a pound of pain', certainly applies. Never source your stocks from unknown supplier/s. Any offer of huge cost savings could be the sign of potential trouble ahead. Authenticated dealers will never mix their stocks with copy products as their supply agreements will be terminated. You would also have the manufacturer support if things did go wrong.

Stories that a supplier has contacts direct to the factory are always a red flag. Follow your instinct if you think all is not above board and don't hesitate to contact the source supplier to confirm product status.

It may be possible that some products could be directly sourced from outside of South Africa which, although they may be 'original', they may be constructed to another specification and the local supplier would not honour any warranties if these became an issue later.

By Kevin Flack

How well do you really know your sockets and plugs?

By John Raptakis Offer Marketing Home & Distribution Division at Schneider Electric

Since its formal introduction in 2018, South Africa's new plug standard, the SANS 164-2, informally referred to as the compact three-pin ZA Plug, is starting to see some adoption, albeit slow and somewhat inconsistent.

To professionals and tradesmen working in the buildings industry, the SANS 164-2 is old hat; it's been around as early as 2000 and features a myriad of safety and usability benefits that sets it apart from the well-known large triangular profile (SANS 164-1) of electric socket outlets seen in most buildings.

The ZA Plug design mirrors the hexagonal profile of the Europlug with an added third pin which is in line with the standard set by the International Electrotechnical Commission.

Considering the ZA Plug meets international standards, and, in fact, some would argue sets a new standard in socket usability and safety, why the sluggish adoption? For one, many buildings still use the old triangular sockets and the adage 'if it ain't broken, don't fix it' couldn't be more apt.

In fact, some estimate it will take South Africa up to 10 years to completely switch over. Part of the problem is South Africa still allows a smorgasbord of plugs in homes and other buildings com-

OMESTO[®]

PV COMBINER BOXES



BY



CB1-1

1 IN &
1 OUT



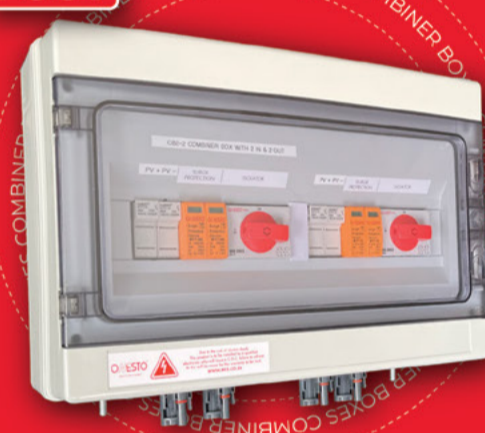
CB2-1

2 IN &
1 OUT



CB2-2

2 IN &
1 OUT



CB4-1

4 IN &
1 OUT



CB4-2

4 IN &
2 OUT



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www.mce.co.za



All new multipurpose professional anti-cut gloves

Tork Craft recently introduced two levels of multi-purpose, professional, cut-resistant gloves.

The A5 and A8 units feature a synthetic leather palm with soft padding, full glove lining, Birds Eye Mesh Fabric with TPR knuckle protection and a touch screen padding on the thumb and index fingertips.

Cut resistant gloves form part of the personal protective equipment (PPE) specifically designed to protect hands from cuts and lacerations due to contact with cutting equipment, machines, tools, or sharp-edged items such as knives, blades, metals, glass, and ceramics. Both products offer the same features, the only difference being that the A8 offers a higher cut resistance. The A5 and A8 gloves are easily distinguishable with the A5 featuring a lime green colour and the A8 in blue. Both ranges are available in small, medium, large, X-large, and 2X-large.



Enquiries: www.torkcraft.com

Safety comes first



Industri Tools & Equipment – specialist in the supply and support of products and services to all industrial sectors throughout southern Africa – offers a comprehensive range of personal protection equipment (PPE), to assist industry in creating a healthy and safe work environment.

“Our fit-for-purpose PPE and workwear clothing have been designed to meet specific application requirements for all environments, even the harshest conditions, and every item we supply meets stringent quality and safety specifications,” explains Christo Badenhorst, General Manager, Industri Tools & Equipment, part of Invicta Holdings Limited. “Our team works closely with customers to ensure we are able to supply products that are needed right away, to ensure personal protection and at the same time enhance safety in all sectors. For this reason, we are constantly extending our range to keep abreast with the latest global trends and to meet exact local demand.”

Industri’s height safety products include quality branded harnesses, lanyards and SABS compliant fall arrest equipment (FAE). Critical PPE products to protect against the damaging effects of noise in the workplace comprise earmuffs and ear plugs, while glasses, goggles and shields offer reliable eye protection. Also available is a range of full and half face masks and filters to guard against the hazards

of fumes, grinding dust and oil mist. Footwear also forms an important part of workers’ safety and includes galoshes and waders, while nitrile, latex, PVC, NBR, leather and cotton gloves provide dependable hand protection.

Also in the range are Conti suits and rain suits, pants, bibs, vests, aprons and arm sleeves, as well as a selection of disposal chemical clothing, caps, covers and headgear.

Industri’s complete product range extends from hand tools for the DIY handyman, to large-scale supply projects into mining, power generation and industrial sectors. Specifically, products include tools and equipment, cutting tools, welding products, lifting equipment, PPE products, locks and machine tools.

The manufacturing division offers workshop repairs and services, as well as the production of a wide range of custom-made industrial materials, including welding screens, strip curtains, fire blankets, spill mats, tarpaulins and dam liners.

Industri Tools & Equipment has secured preferential buying power for reduced costs and this factor, coupled with a fast and effective supply chain, increases value for customers. Another important benefit for local industry is dependable technical support from the highly-experienced team.

Enquiries: www.industri.co.za

The first android 11 smartphone for Zone 1/21 and Div. 1/2



The new Smart-Ex® O2 is the next generation of rugged, intrinsically safe smartphones for hazardous areas and harsh industrial environments from the Pepperl+Fuchs brand ecom. Developed completely in-house, the smartphone has a large 5-inch display, an ergonomic design, advanced features, and optimiSed accessories, making digital applications mobile beyond company boundaries. Global frequency bands and certifications, along with a high-performance operating system, allow users a wide range of applications worldwide.

Whether used as a smartphone, PDA, scanner, or camera, the Smart-Ex O2 facilitates mobile workers’ day-to-day activities anytime and anywhere. Experience the future-proof solution that opens up new possibilities for Industry 4.0 applications.

Highlights of Smart-Ex O2:

- World’s first Android Enterprise recommended smartphone with ATEX/IECEx Zone 1/21, Div.1.
- Ultra-rugged five-inch display and ergonomic design increase flexibility.
- Future-proof device with long-term service concept.
- Powerful accessories – even for the most challenging applications.
- 21 LTE capable, unlocked, and SIM-free smartphone for flexible usage around the world.
- Designed for use in harsh industrial environments and extended temperature ranges.
- High-performance with Android 11 operating system and most powerful and replaceable 4 400 mAh battery on market.

Complete mobility anytime and anywhere

The Smart-Ex O2 is equipped with a large 5-inch multi-

touch display made of tough impact and scratch-resistant Gorilla Glass® 2. The high-resolution display is always easy to use, whether wearing dirty gloves or having wet finger. Even extended temperature ranges and direct sunlight do not affect its readability. Make your digital applications mobile, no matter the conditions.

Increased efficiency and productivity

As a Google-certified device, the Smart-Ex O2 smartphone meets all requirements for industrial use and allows access to various apps for greater productivity, transparency, and safety. It will be the first ATEX/IECEx certified Zone 1 smartphone to meet the Android Enterprise Recommended standard. Programmable keys can be configured specifically to the user.

Versatile applications worldwide

The intrinsically safe Smart-Ex O2 series was developed based on market and future requirements. It supports 21 LTE frequency bands and comes with all relevant approvals and certifications for global use in harsh industrial environments and hazardous areas up to Zone 1/21, 2/22 and Division 1/2. Realize versatile mobile applications all over the world.

Service and support from the experts

With a global network and more than 30 years of experience in explosion protection, our experts are always nearby and ready to support you with in-depth knowledge. Since the Smart-Ex O2 was developed in-house, our own software development and application engineering teams work independently from external partners. Benefit from individualized service and faster response times.

Enquiries: www.pepperl-fuchs.com

International Worx power tools forge ahead in the South African market

One of the most successful brands ever to be introduced into South Africa, Worx, with its huge range of unique and technically advanced power and garden tools continues to grow in the esteem of customers for the quality, innovation and value presented by Worx tools.

Worx continues to build up a reputation for quality and unique tools never seen before in South Africa. Worx has demonstrated itself to be favoured by the trade, retailers, and end user due to its range and support service that have established Worx as a leading brand.

“Brand loyalty to power tools is very high and although Worx has been well accepted by the trade, retail customers and the end users, we are under no illusion that there is still lots of hard work ahead,” says Greg de Villiers, Regional Director for Positec Group SA. “Positec will continue to look for the opportunities in the market to change the status quo. We are here to listen to our customers; if you or your business needs our support or are looking at a new and fresh way of looking at your power tool business, get in touch,” he says.

Enquiries: gregdevilliers@positecgroup.com





Setting up your electrical toolbox

An electrician is only as good as their tools. If you're just starting out in the electrical trade, it can be tricky deciding what's essential and what isn't.

While some electrical tools are essential, others are specialty electrical tools that you won't need until you've got some more experience under your belt.

An important tip for any starting electrical contractor is to buy high-quality tools. Yes, you can get tool kits that are dirt cheap, but you'll find yourself spending more time struggling with your tools than actually doing any work.

As you delve into more detailed work, the problem will become even more apparent. So instead of buying the cheapest electrician's tools you can find, make an effort to buy the best tools you can afford. The difference is well worth the up-front cost.

Starting out

The sheer range of electrical tools available can be intimidating, especially when you first start out.

There are four main categories of electrical tools that handle four different jobs common to all electrical work. These are:

Pliers: The most important tool in any electrician's arsenal is their pliers. Pliers can manipulate, cut, and grip wires, depending on the type. Linesman pliers have a squared-off end that can twist wires together, while the centre-cutting blade can trim wires with ease. Long-nose pliers are very useful to bend wires when creating screw-terminal connections, while diagonal and side-cutting pliers are the default tool for cutting electrical wires with their specialised cutting jaws.

There are also specialty tools like tongue-and-groove pliers, used mainly in plumbing. They're useful for tightening cable clamps, detaching knockouts from metal electrical boxes, and many other niche cases. While tongue-and-groove pliers aren't part of regular plier sets, they may be a worthwhile addition to a growing toolset.

Screwdrivers: Screwdrivers are basic hand tools that are indispensable for electrical work. There are very few projects where you won't use a screwdriver at least once. They're great for removing cover plates, detaching or installing switches, and many other tasks. Electrician screwdrivers often have insulated handles for better safety. Electricians will usually have multiple screwdrivers, as different screws can have different tips.

Wire strippers: Wire strippers remove the insulation from electrical wires, exposing the copper beneath. These allow electricians to connect wires with other electrical components. Many wire strippers also have a cutting edge or cutting jaws to trim exposed wire ends. A wire stripper has various gauged holes to strip different wire widths. Like most hand tools, they come with an insulated grip area for extra safety.

Cutting/crimping tools: Crimping is a method to create a connection between wires without the need for soldering. Wire crimpers connect a wire to a connector, terminal, lug, or two wires to each other. Many crimping tools have various bits to ensure compatibility between the crimp and the terminal in question.

Other tools

These four types of tools form the basis of any electrical work and are essential for any beginner or experienced electrician. It's a good idea to have a variety of pliers, screwdrivers, wire cutters, and wire strippers available to handle different types of cable or wiring. While you may end up relying on one or two pieces of hardware most of the time, sometimes you'll come across a cable or wire where having a different tool comes in handy.

Basic electrical tool set: A great tip for new electricians is to buy a pre-assembled tool kit and then add a new tool when you feel you need it.

A typical kit should include:

- Four types of pliers: side-cutting pliers, diagonal-cutting pliers, needle nose pliers, and pump pliers.
- Screwdrivers with a cushion-grip that offers greater torque and comfort. The set includes a wire-bending screwdriver, conduit fitting and reaming screwdriver, one Rapid Drive screwdriver for tight areas, and the typical keystone tip and cabinet tip screwdrivers electricians use daily.

- Nut drivers.
- An adjustable wrench.
- A power-return tape measure with magnetised head.
- A torpedo level.
- A crimping/cutting tool that crimps 10-22 AWG insulated and non-insulated terminals and connectors and features a tapered nose with a hardened wire cutter.
- Wire stripper/cutter to strip a variety of cables.
- Utility knife so you don't need to use a box cutter.
- Protective eyewear.
- Canvas zipper bag and canvas tool bag.

Digital multimeters: A digital multimeter is an essential tool for most electrical contractors. It can measure various electrical properties, including current, voltage, and resistance. Modern multimeters can measure ac and dc voltage and current, making them incredibly useful for electricians working on large, complex electrical projects. The multimeter you choose will depend largely on the sensitivity of your circuits and the accuracy you need. In general, the more accurate, the better. If you work with sensitive circuits, then a multimeter with a higher impedance is the better option.

Clamp meter: A clamp meter is very similar to a multimeter or circuit tester (aka voltage tester) but may contain several more advanced features. In general, it can measure ac current, dc and ac voltage, resistance, continuity, temperature, frequency, and dc current.

Cordless drill: You'll need a cordless drill when you want to drill holes in metal sheets or whenever you need to mount something. While you can get away with using your electrician's screwdriver, the electric drill will save you lots of time and effort.

Tool belt: While it's possible to carry all of your electrical tools in a canvas bag or tool pouch, a belt helps you keep everything organised. It's an essential piece of equipment when working in dark or tight spaces or when you need quick access to a particular tool. High-quality tool belts will have enough space for all your hand tools as well as some extras like a utility knife, tape measure, and even a circuit tester.

High-tension hacksaw: If you regularly cut through conduit, then you'll need a hacksaw to make your life much easier. Be sure to insert the blade correctly so that the teeth cut as you push, not when you pull back. The blades are relatively cheap to replace and last surprisingly long, despite a lot of abuse. It's an excellent tool for quickly cutting through conduits or anything else that stands in your way.

Electrician straight claw hammer: Electricians often use hammers to secure equipment like transformers or to demolish old electrical components. It's vital to choose the right tool for the job since not all hammers work the same.

Electricians' gloves: Electricians need to protect themselves when working with live power. Many professional electricians will use insulated electricians' gloves to protect themselves from the dangers of live wires and connections. These gloves are strong enough to handle a large amount of voltage while also being thin enough to allow delicate work.

Labelling machine: A labelling machine can make your life much easier. It's easy to lose track of wires or connections during a job, which can spell disaster for complicated wiring. A dedicated labeller will have various electrical symbols available for easy printing on electrical tape, ensuring that electricians stay organised on the job.

Consumables

Markers: Regular markers often wear off or don't write well on particular surfaces. Since marking surfaces can make your job much easier, it's a good idea to buy specialist markers that can write on anything.

Cable ties: Cable ties will hold wire or cables together, ensuring that everything stays organised and neat. They're easy to use, affordable, and you should always have a few on hand.

Cable/wire lugs: Lugs are important electrical tools that attach wires to cables or to other components that need power. Electricians will use a lot of these, so it's worthwhile to have a couple available at all times.

Enquiries: www.phyxtar.ai/blog

Save time and money with an all-in-one installation tester

As every tradesperson knows, time is money. The more jobs you can complete in a day, the more money you can put into your back pocket – it is that simple. While unscrupulous electrical contractors may resort to corner cutting in order to get more work done each day, a tool exists which will allow you to perform your work quicker, more effectively, and safer.

The Fluke 1664 FC Multifunction Installation Tester can assist electrical contractors to perform testing and CoCs 40% quicker. It also saves you space in your toolbox as this machine performs the tasks of multiple devices. The 1664 FC puts a lot of testing power in your hands to quickly and efficiently test to all local regulations, protect appliances, and share test results in real time over your smartphone. It really is a no-brainer. Gerrit Barnard, Technical Sales Manager, says of the 1664 FC that, "It is an all-in-one instrument which the electrician can use to do a full CoC on a building installation."

The Fluke Connect functionality of the tool allows you to send test results to your smartphone via Bluetooth, save them to the Cloud, and share measurements in real time with team members. "It's the fastest way to let your boss or the team see what you see, and to help you get approvals without leaving the field," he says. "One of our customers does solar installations and uses this instrument to do the CoC on site. The beauty of this is that they can give the client the certificate of compliance before they leave. This speeds up the process of having to go back to the site later to finalise the admin."

Furthermore, the Fluke 1664 FC is the only tester with "Insulation PreTest" that stops the insulation test and provides a visual warning if it detects that there is an appliance connected to the system under test. "If it senses something, it will actually stop the test," says Barnard. "This helps you avoid potentially serious and costly mistakes that can cause damage to your customers' peripheral equipment." Notably, Comtest offers product training on the instrument, so customers can get hands-on training on the product before using it in the field, as well as verified repair centres. To further highlight the benefits of the instrument, the 1664 FC has recently been specified for use by Eskom electricians.

Another handy function for electrical contractors is the Auto Test function which allows you to run multiple required tests with a single press of a button, all without having to change test leads or rotary knob positions. Auto Test performs all required installation tests in one sequence, ensuring compliance with local installation regulations. It reduces the number of manual connections, decreases the possibility of making errors and reduces test time up to 40%. Tests performed during the Auto Test sequence include:

- Line test (L-N)
- No-Trip Loop test (L-PE)
- RCD trip current test (type A, AC, or Auto-RCD)
- RCD trip time test (type AC, 30 mA)
- Insulation test L-PE, 500 V
- Insulation test L-N, 500 V
- Insulation test N-PE, 500 V

Other helpful features of the 1664 FC:

- Compact, lightweight (less than 1.3 kg) with a padded neck strap to free your hands.
- Rotary dial knob clearly indicates which function is selected, all in one spot with no complex multi-level menus.
- Offers additional high current loop mode for faster measurements than loop tests with non-trip mode for RCDs.
- Includes Z-max memory for loop tests to support easy evaluation of the highest loop test value.
- Provides unique zero adapter for fast, reliable and accurate test lead and mains cord compensation.
- Performs fast voltage measurement between L-N, L-PE, and N-PE using the mains cord. No need to change measurement connections.
- Measures RCD trip current and trip time in parallel (RCD type AC and A).
- Measures PEFC or PSC and loop impedance in parallel and displays them together on the dual display.
- Offers ring testing so you can select the required input sockets with soft keys and not have to exchange test leads.
- Uses continuity test currents to measure motor windings.
- Detects raised earth voltages > 50 V with Earth Volt Touchpad, indicating potential dangerous situations.
- Features large display with backlight, clear symbols, and exceptionally wide viewing angle for easy and safe readings.

- Offers extended three-layer memory.

The increasing complexity of today's fixed electrical installations in domestic, commercial and industrial premises places extra responsibility on electrical test engineers who are charged with verifying conformity to today's stringent international standards.

Having the right test tool to carry out these rigorous tests is essential, and the 1664 FC is your superior choice for residential, commercial, and industrial installations.

Enquiries: www.comtest.co.za. For product information, visit: <https://bit.ly/3g7E5bu>. Watch the video: <https://bit.ly/3hR1Jcp>





LED lighting and lighting control solution for primary school

Laerskool Garsfontein, established 40 years ago, is one of the highest ranked primary schools in Pretoria. Sports forms a big part of the school, with many sporting activities going into the night. The school recently completed the lighting upgrade of its main sports field and assembly hall. This followed the upgrade of the lighting of its Hockey and Tennis courts, which was also supplied by BEKA Schröder.

With this new lighting solution, the school will save on energy consumption and maintenance costs. Furthermore, the lighting control system provides a significant amount of flexibility as it can be controlled remotely, resulting in further energy savings.

Lighting control system

The Schröder ITERRA lighting control system has been installed on the main sports field and the assembly hall. It has been set to three dimming levels: 30%, 70% and 100%. This allows authorised users linked to the specific project for security reasons, to switch the lighting installation on or off, or to dim it, by simply using an easy-to-use app on their smart devices.

Schröder ITERRA provides a complete user- and installer-friendly wireless control solution for sports and interior lighting applications. It offers site managers a robust, cost-effective and futureproof platform to run

their infrastructure with the utmost flexibility for adapting the lighting to any scenario or event while maximising energy savings and providing the best experience for players, fans and the neighbourhood.

A mobile app-based system, Schröder ITERRA is very easy to operate. It comes with an intuitive visual interface that users can quickly personalise to the layout and settings of their lighting installation.

Schröder ITERRA is based on Bluetooth Low Energy (BLE), the state-of-the-art wireless communication standard fully compatible with all recent smartphones, tablets and even smartwatches. The use of open and standard technologies coupled with the handy App

makes Schröder ITERRA a real plug-and-play remote control solution for extracting the full potential of the lighting installation.

Main sports field

The main sports field serves as a Rugby, Cricket and Athletics field. The old floodlighting installation was replaced with an LED solution with the Schröder ITERRA lighting control system.

The OMNIBLAST-E MIDI was the floodlight of choice, was designed and manufactured in South Africa, and is the ideal tool for sports venues and other very large area applications that require a lighting solution with the highest efficiency and flexibility to adapt to the different lighting needs. It is a cost-effective and efficient solution to maximise energy and maintenance savings.

Cricket practice area

The Cricket Practice area is illuminated with OMNISTAR-MICRO floodlights, mounted on BEKAPOLES.

The OMNISTAR-MICRO, designed and manufactured in South Africa, is available in the standard stirrup mount version and an optional pole mount version. This versatility makes it suitable for use in various environments. The OMNISTAR range has not only been developed for performance and reliability, but also with quality of light output in mind. Furthermore, the added advantages of an LED solution are provided: low energy consumption, improved visibility with white light, limited maintenance, and longer life.

The BEKAPOLE is a glass fibre reinforced polyester (GRP) pole range and is non-corrosive, maintenance-free, light weight, vandal-resistant and sustainable. Over time, it will outlast wood, concrete, steel and aluminium under similar climatic conditions. It is preferred by architects, developers and local authorities for its aesthetic appearance, strength and ease of installation.

Assembly Hall

The Assembly Hall's lighting was replaced with the South-African designed and manufactured ECOBAY luminaire, which delivers the best solution for lowbay and highbay applications. The ECOBAY offers substantial energy savings, high performance and can operate at high ambient temperatures. Thanks to its reliable performance, low dust accumulation and no need for relamping and regular maintenance, the ECOBAY is the luminaire of choice.

Here too, the Schröder ITERRA lighting control system provides the teaching staff with easy access and control.

Astro Multi-Sports field and Tennis Courts

BEKA Schröder provided the lighting solution for Laerskool Garsfontein's Astro Multi-Sports field and Tennis Courts in 2019. The OMNISTAR-MAXI has been installed to illuminate the newly built Astro Multi-Sports field. The Tennis Courts' old HID installation was replaced with the OMNISTAR-MINI floodlight.

Enquiries: northern@beka-schreder.co.za.



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Lighting products for all your growing needs

Giantlight and Indorsun take pride in being able to manufacture light fittings to suit different growers needs and means, as well as create simulations to tell you how many lights, of what type, and at which positions they should be placed in order to maximise your grow. However, the Meteor, the Comet and the Supernova all start out with standard specifications for varying purposes.

For example, all the aforementioned light fittings are made using the McCree Action Spectrum as a baseline for imitating natural sunlight. The companies also include LEDs in the far red spectrum which has known benefits for the growth cycle of cannabis.

The Meteor is best suited for supplemental lighting in greenhouse grows and, because of the design of the LED board and the nature of LEDs themselves, the light fitting can replace 1000 W and higher of HID sources without the risk of over-heating and possibly burning the plants. This saves on cooling costs as well as lowering your electric bill. Also, because of the size of the light, the 'shadow' is minimised.

For an indoor grow, Giantlight and Indorsun would recommend the Comet. It comes in lengths of 1 m or 2 m and has a modular system that allows you to add or remove units to achieve your desired/ required PAR levels from set heights within a custom sized area where the Comet is the only source of light.

If you have a larger scale indoor grow, the Comet has been adapted into the third light experts from the two companies would recommend, for such scale and the purpose, which is the Supernova. The Supernova is essentially the upscaled Comet, consisting of six Comets, attached in a 1 m x 1 m square that hinges in the middle for ease of movement and mounting.

Unlike the Meteor, the Supernova and the

Comet, with their power supplies, could create a bigger shadow if they were to be used in an area such as a greenhouse; this is another reason why they are more suited to indoor grows.

So, if you are looking for lighting for cannabis, Indorsun and Giantlight have worked together to make an array of lights that can meet all your requirements. They are here to help you grow.

Enquiries: www.indorsun.co.za and www.giantlight.co.za

InDorSun

InDorSun is a proudly South African LED manufacturer whose founders originated from the solar and PV industry developing energy efficient solutions for a wide variety of industries. With manufacturing partner Giantlight, InDorSun have shone the light on cannabis horticultural lighting. Together the companies manufacture LED grow lights which produce full-spectrum light that replicates the colour of the sun.

Giantlight

Giantlight is at the forefront of lighting technology – specifically solid-state lighting and everything relating to LEDs and special effects. The company strives to remain the market leader in new and innovative lighting applications and continually brings new products to the market first. From design through manufacture and installation, Giantlight projects make a visual statement. Giantlight offers a comprehensive effect lighting solution.



InDorSun

Cultivating Tomorrow, Together

POWERED BY:



HORTICULTURAL LIGHTS, LET US HELP YOU GROW.

Best for uniformity in indoor grows:

COMET:

- Imitating natural sun-light, the comet is designed to help indoor growers maintain consistency with every batch.
- Sun-Like white and Far red are able to be switched on/off separately for growers preference.

- For Uniformity of light in indoor grows (no sunlight at all) the Comet provides power and even light for a consistent harvest.

METEOR:

- The Meteor is a convection cooled high power LED light fixture that can replace 1000W (and higher) HID sources – allowing the grower to realise substantial energy savings (when compared to HID) as well as providing better quality light than HID.

Best for supplemented lighting in greenhouses:

- Generating light as close to sunlight (InDorSun) as is possible, and adding far red in a proportionally high ratio – provides what your plants require.



• Telephone: +27 71 097 5145,
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 • Website: www.indorsun.co.za



MADE IN SOUTH AFRICA



The Supernova.



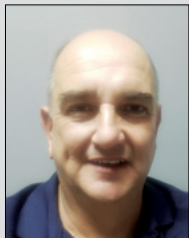
The Meteor.

The Comet.





Swan Electric



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BRIGHT SPARK

THE CLEVER BARMAN

A man walked into a bar and asked the bartender for a glass of water. The bartender pulls out a gun and points it at the man. The man says, "Thank you," and leaves. What really happened?

NOVEMBER SOLUTION

The woman's keys were taken away from her by a concerned friend when she began to be inebriated earlier that night. The woman called and hired a driver to take her home, but did not have her keys to unlock the doors.

JANUARY 2023 FEATURES

- Cables and cable accessories
- Earthing, lightning and surge protection
- Lighting

FEBRUARY 2023 FEATURES

- DBs, switches, sockets and protection
- Energy efficiency
- Lighting

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