



A.L.F.
ELECTRICAL & MECHANICAL

company
profile



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BACKGROUND / HISTORY

A.L.F. Electrical & Mechanical was established in 2005. The member André Furstenburg, privately completed his trade in the early 2000's and subsequently also qualified as installation electrician after completing his wireman's license at the Olifantsfontein trade school. Having done his apprenticeship through 2 small electrical companies, he realised the importance of quality workmanship to be provided to the market at competitive rates, without compromising on proper supervision. This laid the foundation for ALF Electrical & Mechanical's vision and mission.

VISION:

Be the number 1 preferred contractor for electrical & mechanical needs not just in domestic environments, but also for industrial and commercial clients, whilst leaving a lasting footprint and strive on a good and solid reputation.

MISSION:

Striving on our past successes to build our future relationships and continue building partnerships with our clients for years to come - without compromising on quality deliverance in a time efficient manner whilst still remaining competitively priced. Through this growth we can encourage the upliftment of all employees and their future generations.

ALF Electrical strives to deliver at competitive rates, be relevant and knowledgeable on the trends and requirements of the industry and ensure prompt, efficient service regulated by proper supervision and skill development. The company has a strong and impressive presence in the market with consistent and stable track records. A.L.F Electrical has successfully completed contracts not only in Johannesburg, but nationally and in some neighbouring countries.



Quality work is never an accident; it's always the result of skilful execution!

WHY CHOOSE A.L.F ELECTRICAL & MECHANICAL AS YOUR PARTNER OF CHOICE?

- The company has been operational for over a decade - we are well established and prides itself on its excellent reputation within the industry.
- The company boasts qualified artisans with the required skills and accreditations.
- As it is owner managed, you are assured by the best service. A dedicated site supervisor is also in charge of each job order - ensuring prompt and quality deliverance.
- The company prides itself on its Quality Service Delivery and known for its' neatness on every contract assigned - during and after.
- We are available 24/7/365 - a team is always available on standby for any after hour emergencies.
- Our Clients regard as us as partners in their business and become long lasting friends.
- Work done is guaranteed.

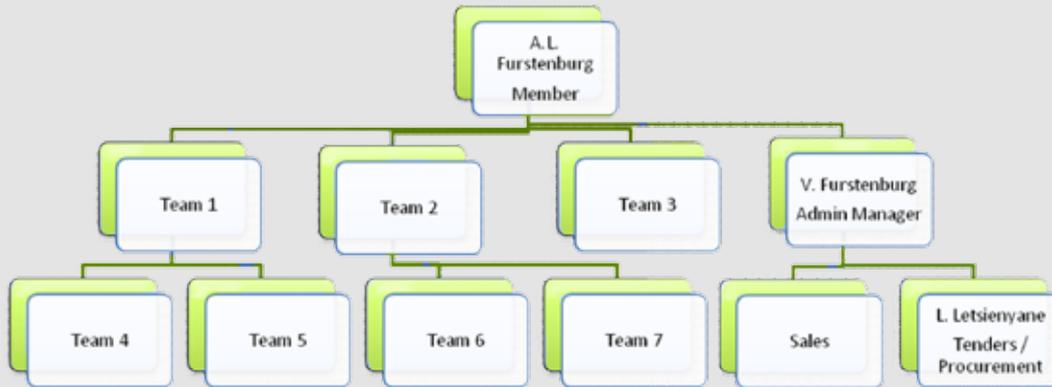
SERVICE ORIENTATED INFRASTRUCTURE

- The company commits itself to providing quality services and availability at any time - all year round.
- The company prides itself on the excellent services they provide, and the customer satisfaction that clients show.
- No task is too big or too small.
- All material and parts used are SABS approved and guaranteed.

The company is headed up by Andre Furstenburg as member. André is a qualified installation electrician and assisted by 7 teams:

- Each team consisting of
 - 1 x qualified electrician
 - assisted by 2 x semi-skilled artisans
- Master electrician available for consulting and sign off on hazardous locations.

Our company offers over 50 years combined knowledge and skills in the field of setting up and commissioning in commercial / industrial properties as well as residential installations.



COMPANY GUARANTEE & ASSOCIATIONS

- A.L.F Electrical & Mechanical guarantees that all work done is correct, according to standards and in line with the ethics of the Electrical Contractors Association (ECA) of South Africa.
- Services rendered are guaranteed for workmanship as every effort is taken with each job order / assignment.
- Spares and equipment used are original, and SABS approved.
- A.L.F Electrical & Mechanical always strive for excellence!
- Registered with The Department of Labour and proud members of the Electrical Contractors Board & Electrical Contractors Association of South Africa, you are assured of dealing with a reputable company.
- As members of the above associations, our team members are always knowledgeable and informed on the current regulations in the industry, and able to offer guidance approved by these governing bodies.
- Courses and road shows are attended annually to ensure all team members are updated on matters within the industry.
- A.L.F Electrical & Mechanical is also a proud member of the East Rand Chamber of Commerce.



POLICIES, PROCEDURES & RISK ASSESSMENTS

- Safety of staff and clients are priority and complied with at all times.
- All proper steps will be taken to ensure that all work done by us, will be accident free.
- Risk assessments will be done by the company, before commencement of every individual job assignment
- Outcomes are achieved by implementing the following **5 step plan**:
 1. Taking a root-cause approach
 2. Standardizing assessment scale and criteria with risk assessment templates
 3. Linking risks to controls
 4. Connecting risks to strategic goals
 5. Embedding risk assessments in everyday activities
- The use of PPE (Personal Protective Equipment) is adhered to at all times - ensuring accident free completion of all tasks assigned.
- The company also has the required safety file in place as per Sheq standards.

TERMS OF PAYMENT & RATES



- Rates can be discussed - depending on volume and length required.
- On-going and regular contracts have the benefit of a discounted rate - mutually beneficial for both parties.
- Percentage discount will apply for early settlement of invoices.
- Credit facilities are however also available.
- Continual contracts can result to negotiation of overtime rates charged as normal time.
- Terms of payment for once off clients' are 7 days upon receipt of invoice.
- The company reserves the right to request a deposit payable prior to commencement at its discretion.

SERVICES

ALF Electrical & Mechanical offers electrical & mechanical repairs and installations to the domestic, industrial and commercial market. These services include:

DOMESTIC & INDUSTRIAL MAINTENANCE & REPAIRS

These include plugs, light fittings, geysers, pool pumps, bathroom heaters, under floor heating systems, DB Boards etc. We supply and install, but should a client decide to supply its own fittings, we are happy to install according to the electrical standards. We can supply a wide variety of plugs, light fittings etc. to accommodate the clients' needs to fit in with the overall scheme and ambience needed.



NEW INSTALLATIONS & COMMISSIONING FROM START TO FINISH

We are proud to have assisted numerous clients with new residences and buildings.

We are happy to work in association with other parties involved, such as the building contractor, carpenters etc. This process ensures client satisfaction.

Our company can also recommend numerous contractors in other fields of expertise, should the client need, i.e. building contractors, paving experts etc.



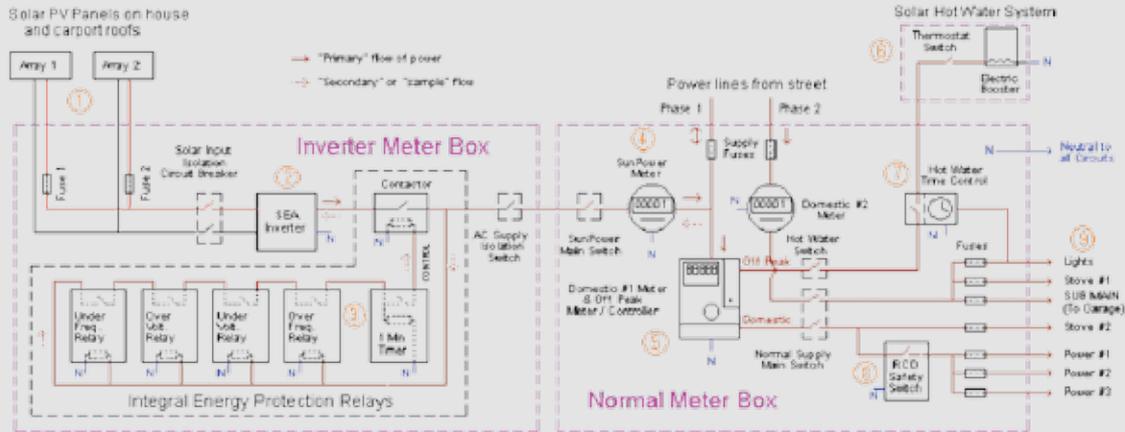
ENERGY EFFICIENCY

Consultation and improvement on energy efficiency in line with the current power shortage in our country:

These includes solar heating, geyser blankets, timers on geysers / thermostats, use of inverters aircon units as opposed to R22 units, switching from electrical to gas stoves & ovens. We also supply & install timers on swimming pool pumps and assist with automatic change over from Mains to Generators. Heat pumps are supplied and installed as efficient source of heating. These offer instant warm water at a fraction of the cost. LED lightning and energy saving lights / bulbs are always our recommendation as this offer a much bigger return on investment.

Did you know...

1 LED down light uses less energy than 17 standard down lights, yet offers much more burning time?



POWER FACTOR CORRECTION

In its simplest form, Power Factor is the ratio of active (usable) power to the total power available. Significant cost and environmental savings can be achieved by implementing power factor correction solutions. Power Factor (PF) is the name given to the ratio of the active or usable power measured in kilowatts (KW), to the total power (active and reactive) measured in kilovolt amperes (KVA).

The value for the power factor can thus vary between 0% and 100%, where a value of 100% delivers all of the power as active power. A value of 0% would mean all the power is supplied as reactive power; no motors would turn and no useful work could be accomplished. Electric utility companies must supply the entire KVA (total power) demand. Since a customer only achieves useful work from the KW (usable) portion, a high power factor is important. The reactive power used by electrical equipment like transformers, electric motors, welding units, server banks, lighting systems and static converters adds additional load to generators, transmission lines, transformers, switchgear and cables. Reactive power can also cause considerable loss of energy through heat dissipation.

WHY THEN IMPLEMENT POWER FACTOR CORRECTION IN YOUR BUSINESS?

Power Factor Correction is the process of maximizing the efficiency of an electrical system to deliver the most possible power as active power. The main benefits are as follows:

POWER FACTOR CORRECTION

Reduced Demand

Most electric utility companies charge for maximum metered demand based on either the highest registered demand in kilowatts (KW meter), or a percentage of the highest registered demand in KVA (KVA meter), whichever is greater. If the power factor is low, the percentage of the measured KVA will be significantly greater than the KW demand. By improving your power factor you can improve your consumptions, thus resulting in lower electricity bills.

Load Carry Capability Will Increase

Loads drawing reactive power demand reactive currents. Installing power factor correction capacitors on existing circuits near the inductive loads reduces the current carried. The reduction in current flow resulting from improved power factor will allow the circuit to carry new loads, saving the cost of upgrading the distribution network when extra capacity is required for additional machinery or equipment. Through this process, you are able to save on unnecessary upgrade costs. The reduced current flow also reduces resistive losses in the circuit.

Improved Voltage

A lower power factor causes a higher current flow for a given load. As the line current increases, the voltage drop in the conductor increases, which may result in a lower voltage at the equipment. With an improved power factor, the voltage drop in the conductor is reduced, improving the voltage at the equipment.

Reduced Power System Losses

Although the financial return from conductor loss reduction alone is seldom sufficient to justify the installation of capacitors, it is sometimes an attractive additional benefit; especially in older plants with long feeders or in field pumping operations. System conductor losses are proportional to the current squared and, since the current is reduced in direct proportion to the power factor improvement, the losses are inversely proportional to the square of the power factor.

Reduced Carbon Footprint

By reducing your power system's demand charge through power factor correction, your company is putting less strain on the electricity grid, therefore reducing its carbon footprint. Over time, this lowered demand on the electricity grid can account for hundreds of tons of reduced carbon production, all thanks to the improvement of your power system's electrical efficiency via power factor correction. So certainly the best long term investment for our environment too!

SUPPLY & INSTALLATIONS OF GENERATORS, inclusive of full automated change over switching

More and more clients are considering the use of generators considering the short supply of electricity in our country and load shedding. This is no longer just a solution to the industrial and commercial client but we are also seeing an increased demand in residential properties. To ensure you will never be caught without power, we install a sensor connected to your main Distribution Board.

As soon as a power cut is determined, your generator will automatically switch over, ensuring no loss of power



SERVICING OF OVERHEAD CRANES & HOISTS AT COMMERCIAL PROPERTIES

We service and repair all makes of electric overhead cranes, electric rope hoists and electric chain hoists. With fully equipped service teams on call 24 hours a day, we can provide a full on-site service covering installation, servicing and repairs.



COMPREHENSIVE SERVICE OF SUB STATIONS, TRANSFORMERS & HT SWITCHGEAR, INCLUSIVE OF JOINTS AND TERMINATIONS

SERVICES

ALF Electrical & Mechanical offers electrical & mechanical repairs and installations to the domestic, industrial and commercial market. These services include:

A substation is a part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions. Between the generating station and consumer, electric power may flow through several substations at different voltage levels. A.L.F Electrical is qualified and experienced in working on these and take pride in delivering successful operations to various key clients in this sphere.



NEW TRANSFORMER INSTALLATIONS AND COMMISSIONING

Being qualified and certified to work on medium and high voltage, A.L.F Electrical can not only conduct repair on transformers, but also supply & install new transformers from scratch.

TRANSFORMER MAINTENANCE INCLUSIVE OF TESTING, CERTIFICATION, PURIFICATION AND MOISTURE REMOVAL

A.L.F Electrical & Mechanical not only supplies transformers, but also assist with:

- Transformer Services, including servicing and refurbishing of current transformers
- Switchgear Services
- HT Installations

Why do we need to purify transformers?

Dissolved gases in transformer oil can cause discharges and overheating which can reduce the electrical efficiency and lifetime of the transformer.

Water contamination can also adversely affect the insulating strength of the oil. With ever-increasing standards for energy efficiency of power distribution transformers, the need to effectively de-gas will become even more important in the future.

Transformer purification can be done either with power on or power off depending on customer requirements. Purification is done by a mobile unit, on site at the client premises.



INFRARED SCANNING WHICH ASSIST IN PREVENTIVE MAINTENANCE

Infrared scanning is set up to perform non-destructive testing called Infrared Inspections / Thermal Imaging. Electrical inspections are the most commonly known and practiced infrared application. Electrical failures can cause personnel injury and even death, equipment damage, material loss, as well as costly downtime. Thermography detects the thermal signatures of problems before they become a failure issue and allows for non-invasive analysis of a wide range of facility processes and equipment.

SERVICES

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Furthermore, thermography enables the work to be conducted while a facility is online (no power disconnected), preventing costly interruption of plant operations. Programs that consistently use Infrared Thermography (IR) limit downtime by preventing unplanned shutdowns and by streamlining repair and maintenance planning. The resulting cost-saving and safety benefits of this type of examination include energy savings, the protection of equipment and capital investment, reduced insurance premiums, quick pinpointing and providing diagnosis of problem areas, as well as establishing repair priorities base on severity and the critical nature of the item being inspected, and setting quality standards. Electrical parts that are damaged or about to fail will emit heat. The thermal camera detects any excessive heat in relation to the ambient temperature. The benefits of infrared scanning include:

- Check for loose or over-tight connections;
- Identify overloaded components;
- Evaluate uneven voltage distribution; and
- Recognize failed or fatigued components within a distribution system without having to isolate circuits.



REPAIRS ON EARLY DETECTION THROUGH INFRARED SCANNING TECHNOLOGY COMPLETE WITH REPORTING IN LINE WITH SANS10142

The naked eye cannot see infrared energy because it is emitted from objects as heat, not as light. The hotter an object, therefore, the more thermal energy it emits. Infrared thermal imaging cameras provide a visual representation of IR (Infrared Thermography) energy emissions. Where quantitative information is required, the thermal camera can also provide accurate surface temperature values of the object being viewed. The images generated can then be saved for later analysis and report generation.

SECURITY SYSTEMS (INCLUSIVE OF CCTV SURVEILLANCE, ACCESS CONTROL & ELECTRIC FENCING)

With the ever increasing rate of crimes in our country, security measures and access control has become priority to both the home owner as well as facilities management in corporate ad commercial environments. From managing only one entrance door to managing entire companies buildings, factories and office-blocks, our Physical Access Control Solutions deliver security, reliability and peace of mind to you.

- Access Control
Our Access Control Systems and Solutions include intercom systems, finger print access, as well as installation of boom gates and access card implementation.
- CCTV Surveillance
Closed Circuit Television is a modern technology designed for visual surveillance monitoring.

With technological advancements, CCTV Surveillance has become a valuable and cost effective tool for loss prevention, safety and security. Whether it is offsite monitoring that you are interested in perusing or simply installing CCTV Surveillance in order to deter criminals and keep a close eye on your property, this security solution has become one of the most reliable amongst residential, commercial and industrial property owners.

- Electric Fencing
The electric security fence is part of the first line of protection to your premises. A.L.F Electrical install security fencing for:
 - Residential Homes
 - Townhouses, Clusters and Estates.
 - Commercial & Industrial Clients
 - Country sites such as small holdings, farms, game reserves, etc.



SERVICES

ALF Electrical & Mechanical offers electrical & mechanical repairs and installations to the domestic, industrial and commercial market. These services include:

ISSUING OF COC'S (CERTIFICATES OF COMPLIANCE)

With all new electrical installations, modifications and the sale of a property's a certificate of compliance is necessary to make sure safety standards and regulations are met. This can only be done by a qualified electrician with wireman's license which is registered with the necessary institutions such as the ECA as governing body and the Department of Labour – as required by law. In order to issue a COC a complete assessment and testing has to be conducted. Should the electrical installation not be to standards as required by law, the necessary repairs have to be conducted prior to issuing. We assist both the private home owner but also preferred choice for numerous estate agents.

PROVISION & CUSTOM MANUFACTURING OF AUTOMOTIVE PANELS & MOTOR CONTROL CENTRES

– as per clients' requirements

We are specialists in the building of panels – as per client requests, to both the private and commercial client. We can also assist by visiting sites and offer guidelines / recommendation on what type of panel to consider. These are then designed and manufactured accordingly.



LEVEL CONTROLS

A.L.F Electrical & Mechanical specialises in the manufacturing of level controlling equipment. This is the ideal solution for boreholes, water pumps and pressure pumps. We have successfully installed automated level control systems complete with pulsar units at the larger part of the Ekurhuleni Town council on both fresh water and sewerage plants. All installed systems protect machinery / pumps against dry runs, lightning and overheating.



PREVIOUS KEY PROJECTS

Successfully executed / success stories

- Johannesburg International Airport
- Reid & Mitchell Boksburg (Actom group of Companies)
- Hitachi South Africa - Boksburg
- Liebherr Africa
- Marthinussen & Coutts (Cleveland & Rustenburg)
- LH Marthinussen
- Ekurhuleni Metropolitan Municipality
- Germiston Civic Centre
- JA Engineering
- Ernst Lowe Boksburg
- Webb Industries (Jasco Group of Companies)
- Stefanutti Stocks - Olifantsfontein

CERTIFICATIONS

- A.L.F. Electrical is registered as per the Workman's Compensation Act No.22 of 1998.
- The Company is also a Level AAAA BEE company and accredited accordingly.
- All work conducted are according to standards and complies with the regulation 9 of Electrical Installation requirement of the Occupational Health and Safety Act (OHS) of 1991.
- A.L.F Electrical is a proud member of the ECA (Electrical Contractors Association) of SA as well as the Electrical Contractors Board of SA (ECB)
- We are a proud member of the chamber of Commerce & Industry and has achieved a silver fleur de lis business award in the category of small to medium sized companies

FACILITIES

The company operates from the East Rand with workshop facilities in both Brakpan & Boksburg. Company assets include vehicles, TLB machine, tools & equipment and carried stock. Our biggest assets by far are our staff compliment, knowledge and skills!



COMPANY DETAILS

A.L.F. Electrical & Mechanical was established in 2005. The member André Furstenburg, privately completed his trade in the early 2000's and subsequently also qualified as installation electrician after completing his wireman's license at the Olifantsfontein trade school.

COMPANY DETAILS

Crown Hill Properties 320 cc Trading as ALF Electrical & Mechanical
Registration Number: 2005/107849/23
VAT Number: 4260223492
Registration with Compensation Fund: 990000364409
Member: André Leon Furstenburg

CONTACT DETAILS

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Mobile: 082 850 1373 / 082 554 0961
Fax: 086 555 3091 / 011 915 5642
Email: info@alfelectrical.co.za
Web: www.alfelectrical.co.za
P.O Box 17035, Benoni West, 1503

BANKING DETAILS

Account Holder: ALF Electrical & Mechanical
Bank Name: ABSA
Account Number: 406 347 6367
Branch name: Dunswart
Branch Clearing Code: 632 005

