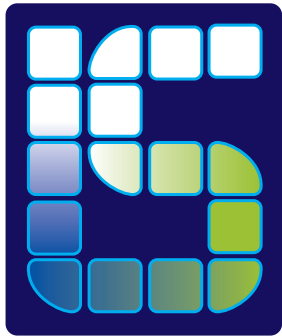


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Introduction



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Lighting Structures has been Africa's high mast supplier for the past 40 years.

We specialise in the design, manufacture and installation of masts and towers for lighting and telecommunication.

We have recently increased our product offering to include the manufacture and supply of lighting poles and decorative light fittings for infrastructural and residential developments.



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Railow Masts



Railow masts are available in heights ranging from 20 metres to 40 metres. The floodlight mounting ring on these masts is attached to a proven and effective raising and lowering system which allows for easy and cost effective maintenance. Railow masts are ideal for all general area lighting applications with the floodlight mounting ring being able to house numerous combinations of floodlight luminaires.

The floodlight mounting ring, suspended from stainless steel wire cables, is raised and lowered by means of a portable double drum winch which is in turn operated with an electric power tool. The masts are equipped with a complete electrical system including a distribution board mounted in the base of the mast and purpose designed trailing cable for providing power to the floodlight luminaires.

Typical applications are lighting of high density housing areas, industrial yards, roadway interchanges and any application where large areas need to be illuminated from a minimum number of positions.



Midhinge Masts

Midhinge masts are available in heights ranging from 10 metres to 25 metres. The hinging action allows for the floodlights to be lowered to the ground without the use of expensive maintenance equipment. Midhinge masts are ideal for general area lighting applications with the floodlight mounting assembly able to house different combinations of floodlights to suit the application.

The floodlights are brought down to ground level by simply hinging the mast open using a lightweight portable hand winch. The hinging action is safe and simple to operate by persons with minimum training and is carried out in a matter of minutes. The mast electrical equipment is safely hidden inside the mast and only accessible once the mast is opened. The cable supplying power to the floodlight luminaires need not be unplugged during the maintenance procedure thus allowing testing of the floodlights with the mast in the hinged down position.

Typical applications are parking areas, roadway lighting and general area lighting.



Internal & External Access Masts



Access masts are available in heights ranging from 10 metres to 70 metres. A caged safety ladder provides access to the floodlights on these masts. The floodlights are mounted on purpose designed cross arms and/or platforms attached to the mast structure and, depending on the application, masts can be designed which are able to house in excess of 150 floodlight luminaires.

The electrical equipment is housed either on the mast or in cubicles adjacent to the mast.

These masts are ideal for sports lighting applications ranging from small training type facilities to major sports stadia such as large cricket stadiums and football fields illuminated for television broadcast lighting.

Internal access masts (named because the access ladder is inside the mast) are used for applications where large quantities of floodlights are mounted on the mast headframe. Generally the electrical equipment, including the floodlight control gear, is accommodated in the base of the mast providing a waterproof and vandal resistant enclosure.

The external access masts have the access ladder mounted on the outside of the mast shaft and are generally used for applications requiring smaller quantities of floodlights where

the structure size can be limited.

Access masts are also available for other general area lighting applications such as electrical sub stations, coal stacking areas and similar industrial applications.



Hydro Masts

Hydro masts are available in heights ranging from 20 metres to 40 metres. They use a portable hydraulic system to hinge the entire mast to ground level for easy maintenance of the luminaires.

Hydro masts are ideally suited to remote locations where the availability of mobile cranes, used for mast erection, is limited and thus costly. The mast is self-erecting requiring only a light duty truck mounted crane to mount the base section onto the foundation. The fact that the entire mast shaft is lowered to a horizontal position allows for inspection of the complete mast at any time without the mast having to be taken down.

The limited number of moving parts ensures a long and virtually maintenance free life of the structure. The mast electrical equipment is safely hidden behind a vandal resistant door and the cable supplying power to the floodlight need not be unplugged during the maintenance procedure allowing testing of the floodlights with the mast in the lowered position.

Hydro masts are ideal for general area lighting applications with the floodlight mounting assembly able to house different combinations of floodlights to suit the application. Typical applications are lighting of high density housing areas, industrial yards and any application where large areas need to be illuminated from a minimum number of positions.





A wide range of municipal type poles can be manufactured.

The pole range includes:

- Straight parallel tapered (swaged) poles up to 15m in total length
- Parallel tapered (swaged) poles with the following type of outreaches
 - Straight outreaches at any angle up to 4 meters in length (spigot and angle details to customers specifications)
 - Curved outreaches with any curve radius up to 4 meters in length (spigot and angle details to customers specifications)
 - Special decorative / architectural outreaches
- Robot and traffic signal supporting poles
- Special brackets / outreaches for wooden or concrete poles
- Power line transmission poles



Technical Information

All poles are designed to SABS 0225 by a registered Professional Engineer

Poles can be planted or surface mounted

Only S355 grade steel, with a minimum thickness of 3mm is used

All poles are hot dip galvanised, by an SABS approved galvaniser, to SABS ISO 1461

Cable entry hole, access door, gland plate and an earth stud are standard with every pole

Ordering Information

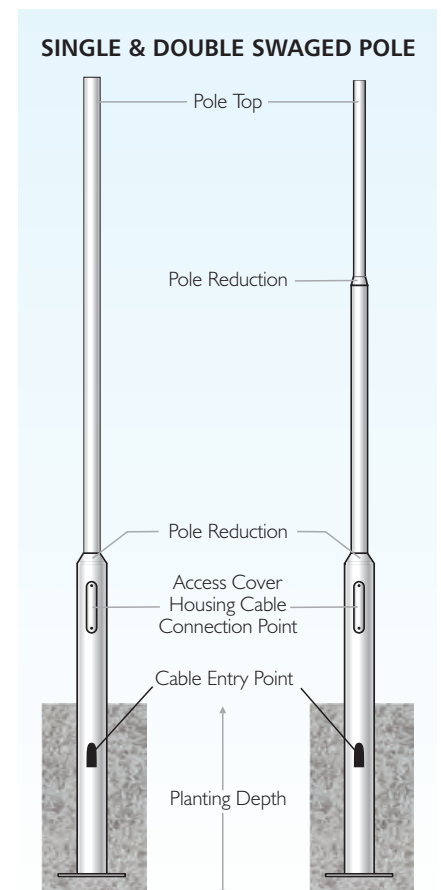
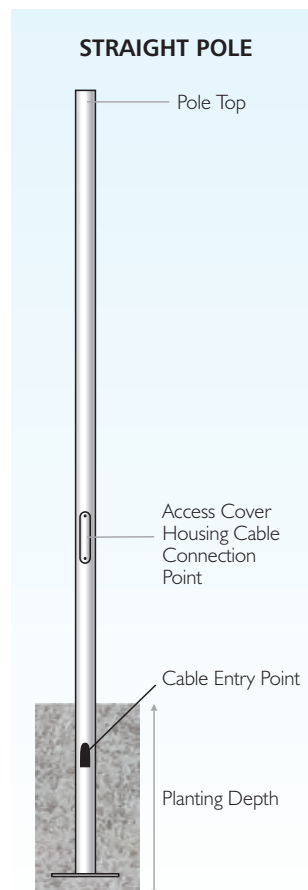
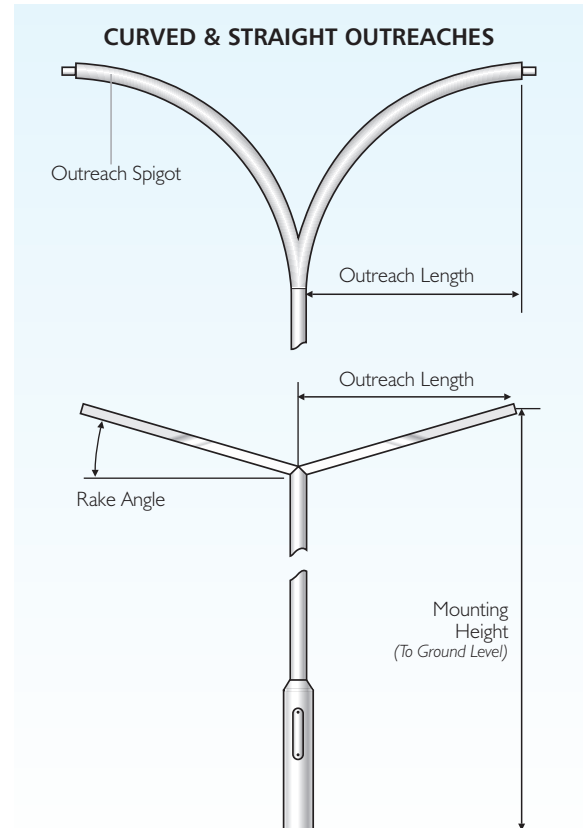
Total length and mounting height required

Pole loading details (number, size and mass of luminaires to be used)

Mounting details (planted or surface mounted)

Spigot/s or outreach/es

Any special requests





Solar Range



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We accept any challenge presented to us by our clients and pride ourselves on designing attractive poles, arms and brackets to support one or two solar panels, according to our clients' specifications.

Battery boxes can either be pole mounted or buried beneath the pole.

We offer the total package on solar streetlights at very competitive prices.

Projects such as Kidds Beach, Bushbuck Ridge, Pietermaritzburgh, Witbank Mine and Medunsa University were completed successfully with our solar and wind turbine solutions.

Furthermore, Lighting Structures have been supplying the DRC with a total solar streetlight solution since 2014 with great success.



Going Green - Solar/Wind



Technical Information

All poles are designed to SABS 0225 by a registered Professional Engineer

Poles can be planted or surface mounted

Only S355 grade steel, with a minimum thickness of 3mm is used

All poles are hot dip galvanised, by an SABS approved galvaniser, to SABS ISO 1461

Ordering Information

Total length and mounting height required

Pole loading details (number, size and mass of luminaires to be used)

Mounting details (planted or surface mounted)

Spigot/s or outreach/es

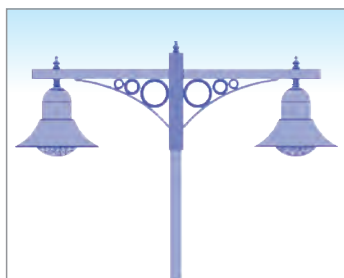
Any special requests



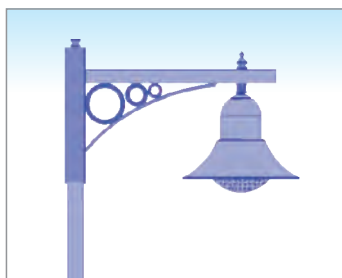
Decorative Type Arms



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SUGARMILL DOUBLE ARM



SUGARMILL SINGLE ARM



SEMI HOOP ARM



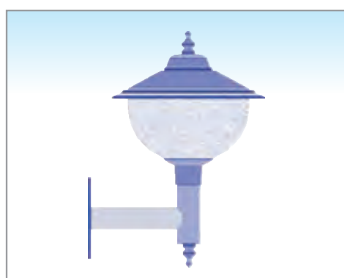
HOOP ARM



DOUBLE 'U' TYPE ARM

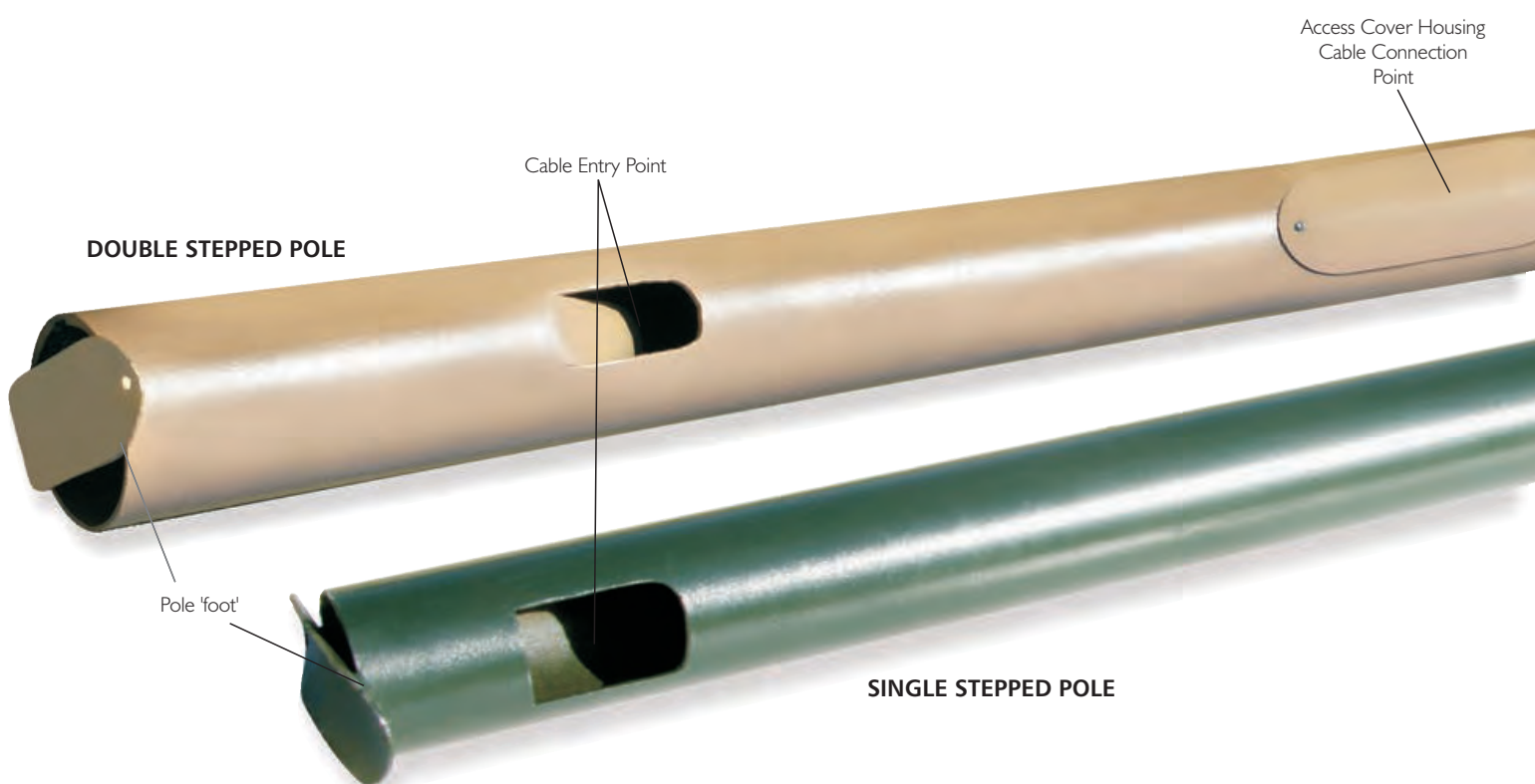


SINGLE 'U' TYPE ARM



'L' TYPE WALL BRACKET

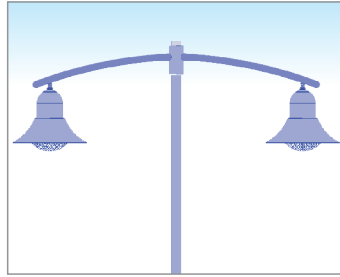
Decorative poles are available in straight 76mm diameter up to 4,5m in total or various stepped options up to 6m total length. Single / double decorative arm options are available. Powder coated in a wide range of colours and finishes. Spigots, curved or straight outreach arms in various lengths are optional.



Decorative Wall Brackets & Poles



BOSCHENMEER SINGLE ARM



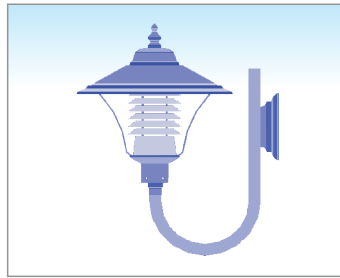
DOUBLE CARNIVAL ARM



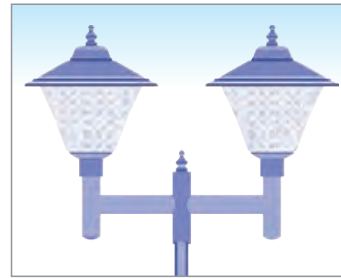
UPWARD CURVED ARM



INVERTED 'U' TYPE ARM



'U' TYPE WALL BRACKET



DOUBLE 'L' TYPE ARM



CLASSICAL CURVE DOUBLE ARM



CLASSICAL CURVE WALL BRACKET



CLASSICAL 'T' DOUBLE ARM

The customer's limits of imagination (within practical and safe engineering restrictions) are the only limits on decorative pole and arm designs. Where required Lighting Structures will assist with specifying a special design to achieve the required architectural image and aesthetics for any project.



Technical Information

All poles are designed to SABS 0225 by a registered Professional Engineer
Poles can be planted or surface mounted
Only S355 grade steel, with a minimum thickness of 3mm is used
All poles are hot dip galvanised, by an SABS approved galvaniser, to SABS ISO 1461
Cable entry hole, access door, gland plate and an earth stud are standard with every pole

Ordering Information

Total length and mounting height required
Pole loading details (number, size and mass of luminaires to be used)
Mounting details (planted or surface mounted)
Spigot/s or outreach/es
Any special requests



Modularity & Aesthetics



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Lighting Structures luminaires, decorative poles and arms are completely modular and interchangeable.

Our experienced sales team can help you meet the design requirements and aesthetics for any project from residential to commercial and beyond.

Colour, style and creativity are your palette, the rest is left to your imagination.

HAT TYPE
POST TOP
(Page 5)



FLAIR ART
BELL
(Page 6)



CLASSIC
BELL
(Page 6)



Poles can be
customised to
accommodate
banners for
branding logos,
direction signs
or advertising



DECORATIVE
TYPE POLES
(Pages 7-8)

BOLLARD
(Page 5)



LAMP TYPES & WATTAGE	BOLLARD
1 x 26W CFL <i>Recommended</i>	●
1 x 9-18W CFL	●
2 x 9-18W CFL	

A selection of lamp types are available, ranging from compact fluorescent, to high pressure discharge lamps. See tables above and right.



LAMP TYPES & WATTAGE	HAT TYPE POST TOP	VICTORIAN COACH LAMP	FLAIR ART BELL	CLASIC BELL	CONE ART BELL	HOME ART BELL
70 - 100W HPS	●	●	●	●	●	●
70 - 100W MH	●	●	●	●	●	●
80 - 125W MV	●	●	●	●	●	●
9 - 57W CFL	●	●	●	●	●	●

NB: Smallest in each range only able to handle 70W HPS, 70W MH & 80W MV

Hat Type Post Top



The Hat Type Post Top decorative luminaire range is ideal for use in public areas, providing super-efficient light distribution.

Elegant and timeless attractive design features provide a stylish appeal and an image of quality and sophistication.

Due to the semi-cut-off light distribution design of this luminaire, upward light output is minimised and the beneficial downward light output is optimally utilised.

Available in pole top and wall bracket mount options and in a range of options of shapes, sizes, colours and diffusers.

Technical Information

LUMINAIRE BODY

Base is manufactured from precision die cast aluminium
Top hat section is manufactured from high grade corrosion resistant spun aluminium
Stainless steel fasteners and aluminium internal brackets
Powder coated in a wide range of colours and finishes

DIFFUSER / LENSES

The diffuser/lens is thermo-formed from the highest quality ultra-high-impact acrylic
Lenses are available in three different styles and three different light diffusion options; Prismatic, Opal or Clear
An anti-glare baffle is normally used with the clear lens IP66 rating

CONTROL GEAR & LAMPS

Only SABS & CE approved control gear and Teflon insulated wiring is used
A wide range of lamp type options corresponding to control gear are available (see page 2 for details)
An asymmetrical reflector (180°) is also available as an optional extra



MODEL AA-HT40-03
With Clear Lens & Anti-Glare Baffle

5 Design Options



Bollard Plain & Stepped



This stylish bollard is ideal for use in both public and residential areas, providing an efficient light distribution for walkways.

Due to anti-glare louvre design, downward light distribution is optimally utilised.

Available in planted or surface mount with various decorative options available i.e spike/flat nut and aluminium casting rings.

Technical Information

LUMINAIRE BODY

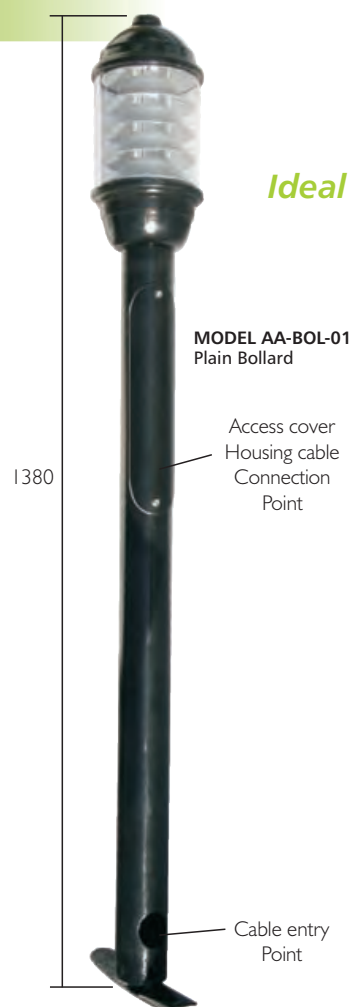
Top, base and decorative finial forming bollard 'head' are all manufactured from die-cast aluminium
The anti-glare baffles are manufactured from anodised aluminium
Base/pole section is manufactured from S355 grade steel and is then hot dip galvanised
Pole section available in single 76mm or stepped 114mm to 76mm thickness
Powder coated in a wide range of colours and finishes

DIFFUSER / LENSES

The clear, cylindrical lens is thermoformed from the highest quality ultra-high-impact acrylic

CONTROL GEAR & LAMPS

Control gear is mounted integrally in base of top section
Only SABS & CE approved control gear and Teflon insulated wiring used
CFL lamp options corresponding to control gear are available (see page 2 for details)



Ideal for Walkways



MODEL AA-BOL-02
Stepped Bollard

Flair Art Bell



The Flair Art Bell luminaire range offers elegant design with flowing flaired lines.

Due to the semi-cut-off light distribution design of this luminaire, upward light output is minimised and the beneficial downward light output is optimally utilised.

Available in pole top, wall bracket and pendant mount options.

Technical Information

LUMINAIRE BODY

Entire luminaire is manufactured from grade 1200 corrosion resistant aluminium

Top dome is manufactured as a two piece, double wall unit with a total thickness of more than 3mm, providing a rigid support structure

Powder coated in a wide range of colours and finishes

DIFFUSER / LENSES

The diffuser/lens is thermo-formed from the highest quality ultra-high-impact acrylic

Lenses are available in semi-dome or teardrop shape

The diffuser is fixed to a reflector and the lens is sealed by means of a sealing gasket cord

The reflector is designed for optimal distribution

A safety 'pin' and grub screws support the spigot

CONTROL GEAR & LAMPS

Control gear is mounted integrally in the top section

Only SABS & CE approved control gear and Teflon insulated wiring is used

A wide range of lamp type options corresponding to control gear are available (see page 2 for details)



Classic Bell



The Classic Bell decorative luminaire range is ideal for use in public areas, providing super-efficient light distribution.

Elegant and classic lines provide a stylish appeal.

Due to the semi-cut-off light distribution design of this luminaire, upward light output is minimised and the beneficial downward light output is optimally utilised.

Available in pole top, wall bracket and pendant mount options.

Technical Information

LUMINAIRE BODY

Complete upper structure is manufactured as a one-piece aluminium precision die casting which houses the control gear

Large dish upper structure is formed from strong, high grade corrosion resistant aluminium

Stainless steel fasteners and aluminium internal brackets

Powder coated in a wide range of colours and finishes

DIFFUSER / LENSES

The diffuser / lens is thermo-formed from the highest quality ultra-high-impact acrylic

Lenses are 'permanently' sealed by means of silicon cord gaskets fixed to the reflector dome

The reflector is designed for optimal distribution

"Life Seal" achieves IP66 rating

CONTROL GEAR & LAMPS

Only SABS & CE approved control gear and Teflon insulated wiring is used

A wide range of lamp type options corresponding to control gear are available (see page 2 for details)



Custom Projects

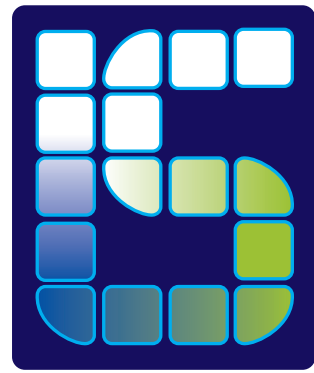
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- 1 - Franschhoek Municipality
- 2 - Midlands Estate - Midrand
- 3 - Blair Atholl Golf Estate, Lanseria, Gauteng
- 4 - Carnival City Hotel & Casino - Brakpan, Gauteng
- 5 - Meropa Sun International Casino - Polokwane
- 6 - Nelspruit Airport
- 7 - Morula Sun - Tshwane
- 8 - Prototype sample for typical Golf Estate







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