

FÖS

lighting

Custodial

foslighting.com.au

FOS Lighting

THE FOS EXPERIENCE

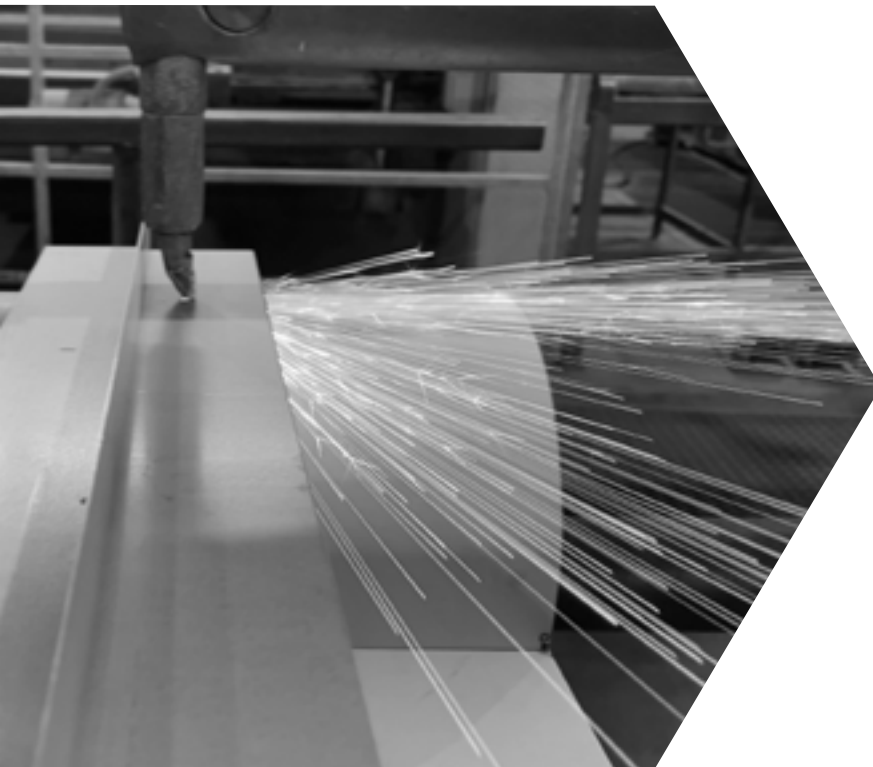
FOS Lighting has an experienced engineering and design team who understand the architectural landscape of the lighting sector and its clients, while a dedicated manufacturing team brings cutting edge solutions to market. With quality and experience, FOS Lighting manufactures and distributes a complete selection of quality luminaires and lighting control systems to the following sectors:

- Office & Communication
- Science & Education
- Art & Culture
- Industry & Engineering
- Transport & Environment
- Adverse & Custodial
- Living & Lifestyle
- Retail & Presentation
- Care & Health
- Leisure & Entertainment
- Sports & Recreation
- Experience & Advertising
- Urban & Architecture
- Wellness & Hospitality



FOS QUALITY

FOS Lighting is a proud manufacturer and exclusive distributor of cutting-edge luminaires within Australia and New Zealand. With our integrated distribution and manufacturing facilities in Melbourne and Brisbane, we can provide a lighting solution from concept to delivery. FOS Lighting is known for its outstanding workmanship, quality, and getting the job done - its International ISO 9001:2015 accreditation is testament to this.



THE FOS WAY

FOS Lighting is a solutions driven, innovative lighting and controls business using in-house experience and engineering coupled with manufacturing facilities in Australia. Working closely with key account customers, its project lighting solutions business is based on innovative lighting concepts using leading edge technology to generate new levels of impact in both design and function.

FOS Lighting is highly regarded in the market for its knowledge of the lighting industry, this is made possible with its committed, highly talented and motivated team members, that continuously strive to provide the highest quality of product and service in the Australian and New Zealand market.

FOS - WE DELIVER

FOS Lighting is dedicated to achieving the desired lighting solution for all lighting requirements. The combination of our experienced research and development teams leveraging the power of the latest technology in 3D modelling programs, and reliable delivery of materials from our trusted and dependable suppliers allow us to meet client expectations and deliver on time.





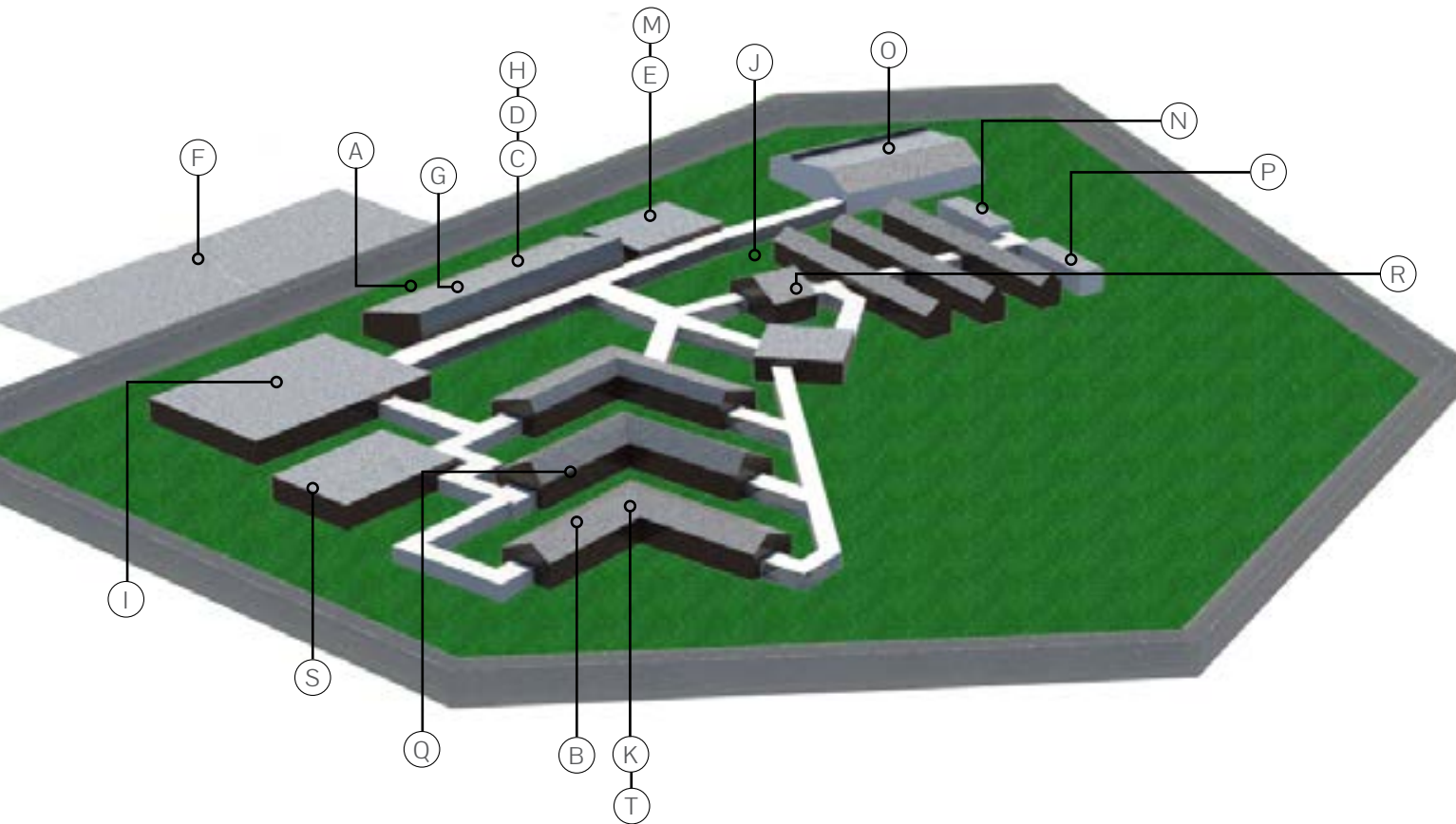
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Solution Centre

Lighting design for Custodial use requires careful consideration of several factors to ensure the safety and security of all users of the illumination. Custodial environments such as prisons, detention centers, or police stations require lighting that provides safety for the staff and occupants, and promotes a sense of security. The lighting needs to be designed to provide not only suitable illumination for the multitude of specialised spaces, but also ensure that the fixtures are vandal resistant and anti-ligature as required.

In custodial environments, it is important to work with a professional lighting designer who has experience in designing lighting for these types of environments. This ensures the safety and security of the staff and occupants, having the luminaires supplied by a reputable manufacturer who has experience in the field and understands the requirements of the relevant standards is essential to the successful implementation of a custodial lighting project. The downside risk associated with a badly executed lighting design is very high for all involved. FOS Lighting and our partners have the knowledge and experience to ensure that your project will be a success, on every metric you measure.



Paths & Walkways (A)



Communal Areas (B)



Amenities (C)



Communal Staff Areas (D)



Recovery (E)



Car parks (F)



Reception (G)



Open Plan Offices (H)



Education Facilities (I)



Prison Yards (J)



Cells (K)



Police Stations (L)



Examination Rooms (M)



Workshop Areas (N)



Physical Education Spaces (O)



Specialist Class Rooms (P)



Mental Health (Q)



Food Service Spaces (R)



Janitorial Spaces (S)



Inmate Amenities (T)



Smart Design

Vandal Proof

Vandal-proof design, when applied to luminaires, refers to the design of lighting fixtures that are resistant to damage caused by vandalism or deliberate misuse. This type of design is often used in custodial infrastructure such as Police Stations and Prisons where the risk of damage or destruction by vandals is high.

Vandal-proof luminaires are designed to withstand impact, tampering, and theft. They are typically constructed with heavy-duty materials, such as reinforced steel or aluminum, and have secure fastenings and shatterproof covers to protect the internal components. These components are subjected to rigorous testing to conform to IEC 62262 standards. They may also feature tamper-resistant screws or bolts to prevent unauthorized access. As an option, Sécurlite, one of the brands FOS Lighting represents, offer in addition to IK11 impact ratings, increased flame resistance, and resistance to graffiti, UV (tropical countries), and corrosion in a marine environment, see the matrix below.

IEC 62262 standard tests

IMPACT RESISTANCE	MASS/DROP HEIGHT
IK0	No protection
IK 1 / 0.14o joule	0.25 kg: 56 mm
IK 2 / 0.20 joule	0.25 kg: 80 mm
IK 3 / 0.35 joule	0.25 kg: 140 mm
IK 4 / 0.50 joule	0.25 kg: 200 mm
IK 5 / 0.70 joule	0.25 kg: 280 mm
IK 6 / 1 joule	0.25 kg: 400 mm
IK 7 / 2 joules	0.50 kg: 400 mm
IK 8 / 5 joules	1.70 kg: 300 mm
IK 9 / 10 joules	5 kg: 200 mm
IK 10 / 20 joules	5 kg: 400 mm
IK 11 / 50 joules	10 kg 500mm

Sécurlite VK® Vandal resistance rating matrix

VK® vandal resistance rating.
The VK® rating allows better characterization of anti-vandal luminaires: it includes mechanical strength beyond IK10 (>20 joules), as well as the other characteristics involved in vandal resistance. For example, a luminaire that withstands 50 joules, resists ripping out, and is fitted with tamper-proof screws is VK35.

VK ⁰⁰ rating	1 st position	2 nd position	3 rd position
0	< 10 joules	no protection	no protection
1	10 joules	standard fastenings	flame resistance
2	20 joules	vandal-resistant fastenings (for secure closure)	graffiti resistance
3	50 joules	rip-out resistant	increased UV resistance (tropicalisation)
4	80 joules	rip-out resistant + standard fastenings	resistance to marine environment
5	120 joules	rip-out resistant + vandal resistant fastenings	-
6	160 joules	anti-ligature + vandal-resistant fastenings	-
7	200 joules	-	-
8	-	-	-

In addition to their robust physical construction, vandal-proof luminaires may also incorporate features that discourage misuse, such as angled or recessed light sources reducing the opportunities for some forms of destructive behavior.

Overall, vandal-proof luminaires are an important consideration in custodial lighting design, as they help ensure that lighting is both effective and durable in these spaces. Continuous illumination is an essential component of monitoring inmates in confined spaces, where the potential for disruptive events is a constant possibility and illumination serves as a deterrent when combined with video surveillance. The use of LED light sources also contributes to the efficacy of video surveillance systems as LED typically offers better glare cutoff which reduces flaring and also delivers a “whiter” light with superior colour rendering, which contributes to the imagery being better defined, therefore inhibiting the opportunities for misbehavior going unobserved by human or electronic surveillance.



Image Credit: Securlite

Smart Design

Anti Ligature

Anti-ligature design reduces & prevents people from self-harm. When looking at lighting, we mainly look at Fixed Anti Ligature luminaires, these are designed to prevent the attachment of any material that could be used for hanging or strangulation, such as cords, belts, or sheets. Non-ligature LED light fittings also provide additional benefits, such as energy efficiency, durability, and quality of light.

Also, items need to be weaponry deterrent. Items cannot be taken apart and components be used as weapons. Anti Ligature luminaires are usually used in environments and spaces where people are considered to be at risk, this includes prisons and secure healthcare facilities.

When designing an Anti-ligature luminaire, we reduce any sharp edges, maintain smooth flat surfaces, and replace any normal fixings with tamper resistant security screws.

Why non-ligature LED light fittings are needed.

According to a national study conducted in the UK in 2012, 77% of the 448 suicides that occurred on psychiatric wards were by hanging. The Care Quality Commission also found that hanging accounted for 55% of male suicides and 42% of female suicides in mental health settings. These statistics demonstrate the need for reducing the ligature risks in these environments by using non-ligature LED light fittings. Non-ligature LED light fittings are also required to comply with the official guidance and standards for custodial and mental health facilities. Similarly, the US Ministry of Justice's "Design Guide for Safer Cells" specifies that "light fittings should be flush mounted, tamper-resistant and anti-ligature" and that "LED lighting is preferred for its low energy consumption and long life".

How non-ligature LED light fittings are designed.

Non-ligature LED light fittings are designed to remove any hard edges, corners, gaps, or protrusions that could be used to attach or secure a ligature. Some of the design features that are commonly used to achieve this are:

- Recessed or flush mounting.
- Rounded or sloped edges.
- Tamper-resistant fasteners.
- Shatterproof lenses.
- Gapless installation.

What are the benefits of non-ligature LED light fittings?

Non-ligature LED light fittings offer several advantages over conventional light fittings, such as:

- Energy efficiency.
- Durability.
- Quality of light.
- Control and dimming.

Non-ligature LED light fittings are essential for ensuring the safety and well-being of vulnerable individuals who may be at risk of suicide or self-harm in custodial and mental health settings. These fittings are designed to prevent the attachment of any material that could be used for hanging or strangulation, while also providing other benefits, such as energy efficiency, durability, and quality of light. FOS Lighting provides a number of lighting solutions that meet the requirements listed above.

Emergency Lighting

During emergency situations, such as power outages, fires, or other incidents, the need for reliable and effective emergency lighting becomes critical, especially in custodial spaces. Robust emergency lighting systems play a vital role in providing illumination and guidance, helping to maintain order and prevent panic in these high-security environments.

Custodial environments typically have complex layouts, with multiple levels, corridors, and cells, making it essential to have lighting solutions that can assist with the effective navigation of these spaces. Key aspects of robust emergency lighting in custodial environments are reliability, vandal proofing, and anti-ligature design. Battery backup systems are crucial to ensure continuous illumination during power outages or failures.

Another critical factor to consider is the visibility and clarity of emergency lighting. In custodial environments, where quick response and evacuation are essential, it is crucial for inmates, staff, and visitors to be able to locate emergency exits, evacuation routes, and safety equipment, without confusion. This may require a higher output threshold than what is prescribed by the AS/NZ2293.3 standard. Each case to be assessed on its individual merits.

To withstand the demanding nature of custodial environments, all lighting fixtures must be built to be robust and tamper-proof. Vandal-resistant enclosures, made of sturdy materials such as impact-resistant polycarbonate or stainless steel, can prevent damage caused by deliberate or accidental physical force. Tamper-resistant screws and fixtures should be used to secure the lighting units to walls or ceilings, minimizing the risk of tampering or unauthorized access.

Furthermore, custodial environments often require specialized lighting solutions to meet specific safety and security needs. For example, in areas with potential self-harm risks, anti-ligature emergency lighting fixtures can be installed to minimize the chances of inmates using them for harmful purposes. These fixtures have no exposed cords, cables, or sharp edges that could be used as ligature points.

Incorporating advanced technologies into emergency lighting systems can enhance their effectiveness in custodial environments. For instance, intelligent monitoring and control systems can provide real-time information about the status of emergency lighting fixtures, including battery health, faults, or tampering attempts. This allows facility management and security personnel to proactively address any issues and ensure that the emergency lighting system is always in optimal condition.

Regular maintenance and testing of emergency lighting systems are crucial to ensure their ongoing functionality. In custodial environments, where disruptions and incidents can occur frequently, it is essential to establish a comprehensive inspection and maintenance schedule. This includes regular checks of battery health, light output, and overall system performance. FOS Lighting curates luminaires and control systems that meet these specialised requirements.



Image Credit: Securilite



LED Lighting & CCTV

LED lighting provides optimal results from CCTV (Closed-Circuit Television) systems due to several key advantages it offers in terms of image quality, energy efficiency, and longevity.

Firstly, LED lighting provides superior illumination for CCTV cameras compared to more traditional lighting sources. Quality LEDs emit a high CRI light that closely resembles natural daylight, resulting in better color accuracy and clarity in surveillance footage. This enhanced visibility is crucial for capturing accurate details, identifying individuals, and detecting any suspicious activities or incidents.

Secondly, LED lighting is highly energy-efficient. LEDs consume significantly less power compared to traditional lighting technologies, resulting in lower energy costs for prolonged CCTV system operation. This efficiency is particularly important in maintaining continuous surveillance in various areas, as CCTV systems operate 24/7 in custodial environments. LED lighting helps minimize the strain on power resources while ensuring consistent, reliable illumination for surveillance cameras, in addition, LEDs provide continuous high-quality flicker-free illumination when emergency power backups kick in, arguably when the need for clear, continuous CCTV coverage is most essential.

Additionally, LED lighting offers a longer lifespan compared to other lighting options. LED has a significantly extended operational life, often lasting tens of thousands of hours. This durability reduces the frequency of replacements, minimizing maintenance requirements and associated costs, especially in environments where there is a security risk, requiring greater expenses in the form of accompanying security guards etc. With longer-lasting LED lighting, CCTV systems can operate reliably for extended periods, ensuring uninterrupted surveillance coverage. High quality LED fittings come with designed cut-offs that control glare and lens flare.

LED lighting also provides enhanced flexibility and control. Appropriately specified LED fixtures can be easily dimmed or adjusted to achieve the desired lighting levels for different surveillance scenarios. This adaptability allows for customized illumination, optimizing image quality and minimizing any potential glare or overexposure that could hinder the effectiveness of CCTV footage.

FOS Lighting fittings are available in high CRI, vandal-proof variants, ideal for use with video surveillance systems.

Custodial Buildings

When it comes to illuminating high security facilities, it is important to consider the unique requirements and challenges of such a facility. The lighting must provide adequate visibility for staff to perform their duties safely and efficiently, as well as create an environment that is conducive to rehabilitation and reducing the risk of violence. Here are some of the best types of illumination for prison buildings and why:

1. **Linear High bay lighting:** Linear High bay lighting fixtures are typically used in areas with high ceilings such as gymnasiums, corridors, and recreational areas. These fixtures emit a bright, uniform light that helps to reduce glare and shadows, making it easier for staff to monitor activity and identify potential threats. It also ensures that CCTV coverage is maximised in its effectiveness to record events.
2. **Indirect lighting:** Indirect lighting fixtures are mounted on the walls or ceilings and emit light upwards, reflecting off the surrounding surfaces and creating a soft, diffused glow. This type of lighting is ideal for common areas such as dayrooms and dining halls, as it provides a calming and relaxing atmosphere for inmates.
3. **Low-level lighting:** Low-level lighting is used in areas such as sleeping quarters and healthcare units, where a soft, dim light is required for privacy and to reduce the risk of disturbance during nighttime checks. This type of lighting helps to promote a restful environment and can improve sleep quality for inmates.
4. **Motion-activated lighting:** Motion-activated lighting is an energy-efficient option that is ideal for areas such as stairwells and outdoor walkways. These fixtures turn on automatically when movement is detected and turn off after a set period of time, reducing energy consumption and improving safety by eliminating dark areas.
5. **Emergency lighting:** Emergency lighting fixtures are critical in the event of a power outage or emergency situation, providing illumination to enable safe evacuation and access to emergency equipment. These fixtures are typically battery-powered and can provide several hours of backup lighting.

By using a combination of these lighting types, prison facilities can provide a safe, secure, and rehabilitative environment for inmates and staff. FOS Lighting and our partners provide a range of fittings that meet all the varied requirements of the custodial market.



Image Credit: SecurLite



Courtesy of Otahuhu Police

Police Stations

Introduction to the Custodial System

Generally the first stop on the custodial journey of suspects, the Police Station has to fulfill a range of services. As such it needs to provide custodial, administrative as well as communications functions that carry across the entire gamut of judicial services. As a result it requires lighting compatible with the more traditional custodial role in the holding cells area, while the office and interview spaces call for a mix of administrative and vandal-proof fittings. Police stations also require external lighting to assist the population to identify the location of the facilities. Being Government departments there is a requirement that these buildings meet the latest in efficiency and lighting effectiveness standards as prescribed by lighting specifier experts.

FOS Lighting represents a broad range of brands that specialise in the provision of lighting that meets the various and sundry requirements of the spaces that can be found in a Police Station environment.

SÉCURLITE - P600

A comprehensive range of bedhead luminaires for correctional environments.



Features

- Rip-out resistant
- Stainless steel vandal-resistant switch
- Opal polycarbonate diffuser
- IK11
- 3 module options

ECOPOINT - Edge-Lit Panel G4

Available as recessed, surface mount or suspended with the SOLUS high CRI option.

Features

- Exceptional LED Panel available in 600x600, 300x1200, 150x1200 options
- L90 @ 50,000 hrs
- UGR<19
- IP20 / IP40 optional IP65
- IC4
- IK06



SÉCURLITE - Mini-Borgo Prison

Wall-mounted fitting with switch for correctional environments.



Features

- Very compact cell wall luminaire
- Rip-out resistant
- >65° inclined top surface
- Clear pebble or opal polycarbonate diffuser available
- Stainless steel vandal resistant screws
- IK11
- IP65

VEKTA - Extreme

IP66 | IK10 vandal resistant linear extrusion. VEKTA Extreme (VX) is breaking the barrier of Aesthetic IP and IK rated fittings.

Features

- Up to 3.5 meters seamless section.
- Compact external profile, clear anti-yellowing polycarbonate internal extrusion houses the electronics.
- Permits single linear solution indoors and outdoors.
- Australian designed and assembled.





Image Credit: Securlite

Cells

Safety as well as security

Vandal-proof and ligature-free LED lighting is essential in prison cells to address both security and safety concerns. These lighting fixtures are specifically designed to withstand intentional damage, minimize potential self-harm risks, and create a secure environment.

In a prison setting, vandalism and deliberate damage are constant concerns. Inmates may attempt to tamper with or destroy lighting fixtures to create opportunities for illicit activities or to express their frustration. Vandal-proof LED lighting fixtures are constructed using robust materials, such as shatter-resistant polycarbonate, to prevent damage from physical force or tampering attempts. By installing these fixtures, prisons can significantly reduce the risk of inmates disabling or destroying lighting in their cells.

Moreover, the issue of ligature points is of critical importance in prison cells. A ligature point refers to any object or fixture that can be used for self-harm or suicide attempts by attaching a ligature, such as a bed sheet or clothing, to it. Ligature-free LED lighting fixtures are specifically designed to eliminate these risks by concealing wires and removing any potential attachment points. This ensures that inmates cannot use the lighting fixtures as a means for self-harm.

By implementing vandal-proof and ligature-free LED lighting in prison cells, correctional facilities prioritize the safety and security of both inmates and staff. These fixtures not only deter vandalism and tampering, but also minimize the risk of self-harm incidents, supporting the overall well-being and welfare of inmates. Creating a secure and controlled environment through the use of such lighting fixtures promotes a safer and more manageable prison environment.



SÉCURLITE P600

SÉCURLITE Borgo Prison

SÉCURLITE Mini-Borgo Prison

SÉCURLITE Titan Angle

SÉCURLITE ESL Stainless

FREND VPBBS - LED

SÉCURLITE Bang

SÉCURLITE - P600

A comprehensive range of bedhead luminaires for correctional environments.



Features

- Rip-out resistant
- Stainless steel vandal-resistant switch
- Opal polycarbonate diffuser
- IK11
- 3 module options

SÉCURLITE - Borgo Prison

Wall-mounted fitting with switch for correctional environments.

Features

- Rip-out resistant
- >65° inclined top surface
- Clear pebble or opal polycarbonate diffuser available
- Stainless steel vandal resistant screws.
- IK11
- IP65



SÉCURLITE - Mini-Borgo Prison

Wall-mounted fitting with switch for correctional environments.

Features

- Very compact cell wall luminaire
- Rip-out resistant
- >65° inclined top surface
- Clear pebble or opal polycarbonate diffuser available
- Stainless steel vandal resistant screws
- IK11
- IP65



SÉCURLITE - Titan Angle

Titan angle is a comprehensive range of steel luminaires designed to withstand large amounts of vandalism.

Features

- Wall mounted, 45° & 30° degree option.
- Braced opal polycarbonate diffuser
- Stainless steel vandal resistant screws
- IP65
- IK11





Image Credit: Securlite

Communal Areas

Safety, Security & Observation

The need for vandal-proof and ligature-free LED lighting is equally critical in shared spaces within prisons. These areas, such as common rooms, dining areas, and recreational spaces, are frequented by multiple inmates and staff, making it crucial to prioritize safety, security, and the prevention of intentional damage or self-harm incidents. It is also essential that CCTV and other forms of observation are supported by the choice of, and quality of the illumination provided.

Vandal-proof LED lighting fixtures are essential in shared spaces to mitigate the risks associated with deliberate acts of vandalism. In a prison environment, where tensions and conflicts may arise, inmates might attempt to damage or disable lighting fixtures to create opportunities for illicit activities or to express their frustrations. Vandal-proof fixtures, constructed with durable materials and impact-resistant components, can withstand physical force and tampering attempts, deterring inmates from engaging in destructive behavior and maintaining a secure environment for all occupants.

Furthermore, the issue of ligature points remains a significant concern in shared spaces within prisons. The presence of exposed wires, sharp edges, or fixtures with potential attachment points can pose a risk for self-harm or suicide attempts by inmates. Ligature-free LED lighting fixtures are specifically designed to eliminate these risks by concealing wires, removing sharp edges, and ensuring there are no potential attachment points for ligatures. By implementing these fixtures, prisons can significantly reduce the risk of self-harm incidents and create a safer environment for all individuals within shared spaces. Overall, vandal-proof and ligature-free LED lighting fixtures are vital in shared spaces within prisons to enhance safety, security, and well-being.



FRENDRIGHTING VPBS SÉCURLITE Titan Angle SÉCURLITE Titan Video Surveillance SÉCURLITE Borgo SÉCURLITE Bang FRENDRIGHTING SPF-LED SÉCURLITE Senspot

SÉCURLITE- Titan Video Surveillance

A comprehensive range of steel luminares designed to conceal a video surveillance camera.



Features

- Comes in a 45° & 30° degree module option
- Braced opal polycarbonate diffuser
- Stainless steel vandal-resistant screws
- IK11
- IP65

SÉCURLITE - Urbaline System

Urbaline system is a linear system which allows for multiple Urbanline luminaires to be connected.

Features

- For better architectural integration, joining panels and supports are available for converting the fittings into corner or ceiling-mounted lighting strips
- System is flexible and permits custom, unique solutions based on project requirements
- Detail your project and the Design Office will be able to offer you specific solutions to suit your requirements



SÉCURLITE- Borgo

A compact, rip-out-resistant, wall-mounting luminaire.



Features

- Very compact wall-mounting luminaire
- 4000K
- Polyester powder-coated finish
- Opal polycarbonate diffuser
- Stainless steel vandal-resistant screws
- IK11
- IP65

VEKTA - Extreme

IP66 | IK10 vandal resistant linear extrusion. VEKTA Extreme (VX) is breaking the barrier of Aesthetic IP and IK rated fittings.

Features

- Up to 3.5 meters seamless section dependant on module selected
- Compact external profile, clear anti-yellowing polycarbonate internal extrusion houses the electronics
- Permits single linear solution indoors and outdoors
- Australian designed and assembled





Image Credit: Larry Farr, unsplash.com

Prison Yards

High visibility, High security

LED lighting is the preferred choice for prison yards to achieve optimal results due to its numerous advantages in terms of visibility, durability, energy efficiency, and maintenance.

Firstly, LED lighting provides excellent visibility in prison yards, ensuring clear and uniform illumination across the entire area. LEDs emit a bright, white light that closely resembles natural daylight, enhancing visibility for both inmates and staff. This improved visibility is crucial for maintaining security, preventing illicit activities, and ensuring the safety of individuals within the yard. The superior cutoffs and optics associated with quality LED luminaires ensures that surveillance cameras capture clear images, allowing for effective monitoring and identification of any potential incidents or security breaches while preventing flare and glare. Furthermore, LED lighting offers exceptional energy efficiency, compared to traditional lighting technologies. LEDs also consume significantly less power, resulting in reduced energy costs and environmental impact.

Prison yards are challenging environments that are prone to vandalism and harsh weather conditions. LED fixtures are built with sturdy materials and are designed to withstand physical impact and tampering attempts.

Additionally, LED lighting requires minimal maintenance. LED fixtures have a long operational life, lasting tens of thousands of hours. This longevity reduces the need for frequent bulb replacements, minimizing maintenance costs and disruptions. In a prison environment where safety and security are paramount, having reliable lighting that requires minimal upkeep is crucial for uninterrupted operations and maintaining a well-lit yard.



ECLATEC Keris 5

ECLATEC Pixel 1

SÉCURLITE Urbaline System

ECLATEC Sonata Wall Mount

ECOPOINT Area Light G2

ECLATEC Stelium

SÉCURLITE Bang

ECLATEC - Keris 3

Powerful floodlight designed for poles from 5 to 20 meters high, with a range of optics to control waste illumination.



Features

- Colour temperature: 2200K, 2400K, 3000K & 4000K
- IP 66
- IK 09
- Bowl in thermally tempered and screen printed flat glass
- Polyester powder coating, any colour available
- Ambient temperature: - 40°C to + 40°C

ECOPOINT - Area Light G2

Pole mounted fitting with a range of micro-lens optics.

Features

- 3/5/7-pin NEMA socket, Photocell
- 3000K, 4000K, 5000K, 6000K
- - 30 to +55 deg. C
- Alum. body (max. 3.5% Cu), silicon seals,
- 304 Stainless screws
- IP66
- 60 - 300 Watt versions available



ECLATEC - Pixel 1

Body and frame in injected die-cast aluminium. Thermally toughened and screen printed flat glass bowl.



Features

- BLS strips source
- Polyester powder coating, any colour available
- Colour temperature: 2200 K, 2400 K, 2700 K, 3000 K and 4000 K
- IP 66
- IK 09

ECLATEC - Sonata Wall Mount

Designed for bracket mounting, the discrete luminaire provides modulated light from a sealed weather resistant unit.

Features

- Polyester powder coating, any colour available
- IP66
- IK10
- Convertible wall-mounted plate for guiding cable from above or from below
- CCT 2400K, 2700K, 3000K or 4000K
- Narrow or wide beam with ORALENS lenses
- High recyclability rate





Image Credit: Yatala Prison

Reception

First contact

A first impression when entering a reception is vital, when receiving visitors, the facility needs to be designed in such a way as to address the understandable stressors that family and friends may experience as well as address the purely functional needs of members of the legal/judicial and enforcement fraternity visiting their clients and dealing with the associated administrative tasks. Luminaires should be designed to minimise glare and deliver the requisite level of illumination according to AS_NZS 1680.2.2. to assist people using digital devices with monitors.

It also needs to be cognisant of the specialised needs of a custodial environment. Carefully considered lighting can create a professional and relaxing environment, as well as providing staff with a functional workspace in which to address visitor needs.

A collection of products within the FOS Lighting range can create both an inviting and functional space to work within.



VEKTA - V60100

VEKTA V60100 provides a breath of opportunity for lighting creativity with its wide variety of options and customisation features.



Features

- Emergency options available on request
- Welded joints on request
- Available optics include Opal Diffuser, Linear Lenses, Track, Louvered & Mini Spots
- Available mounting options include: Surface, Suspended, Recessed & Wall mounted



FORMALIGHTING - Circo Pro

An ultra-slim, large circular light surface, delivering both direct and indirect light, with uniform and visually comfortable light distribution, boasting a UGR<19.

Features

- Ceiling canopy made of cast aluminum. Housing in aluminum extrusion
- Available in four diameter sizes - 350mm, 450mm, 600mm and 900mm
- In two versions for surface mounted or pendant installation.
- CRI>80
- CCT 3000K | 4000K



FORMALIGHTING - Galaxis Pro

Provides a visually comfortable, energy-efficient uniform general lighting solution, also ideal for use in under canopy or bathroom locations.



Features

- Citizen CLU Series
- CRI>90
- CCT 3000K, 4000K
- Luminaire body and heat dissipator for passive cooling in cast aluminium. Secondary reflector is precision formed from highly reflective pure aluminium
- Available in four different sizes

FORMALIGHTING - Cobra Flex

A modular system which can flex in two dimensions due to its unique joining system.

Features

- 28mm x 31mm x 54mm fixtures
- Surface mounted
- CRI>90





Image Credit: Yatala Prison

Open plan office

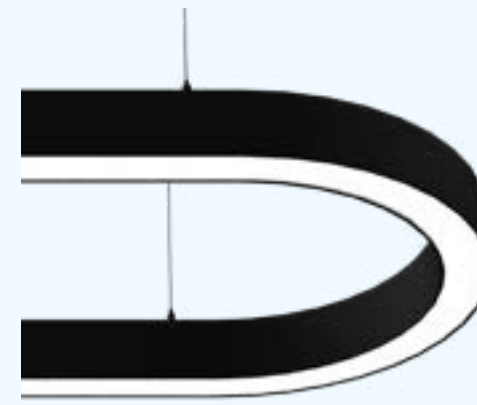
The work never stops

The part of the lighting standards that applies to these types of spaces is AS/NZS 1680.2.2:2008 which sets out recommendations for the lighting of offices and similar tasks, including screen-based tasks. Open plan offices involve a range of tasks, some in the horizontal plane at desk level and below, as well as some in the vertical. Illumination should be of such a nature that these variations are accommodated by the luminaires included in the lighting design.

FOS Lighting can provide task lighting and wall washing type luminaires suited to your budget and of a variety that will best suit the ambiance that you wish to achieve while not sacrificing the efficiency of the tasks being performed. In addition, control systems should be of such a nature that the lighting provided to a specific workstation can be adjusted to maximise the comfort of the user, while at the same time not creating discomfort for the people in the vicinity via glare or reflections off their screens. In addition, flicker minimisation is critical for open plan spaces when dealing with screen-based tasks as it can have a dramatic impact on the ability to discern details such as legibility and, where relevant the motion of images. In addition to these considerations the custodial environment will also have a role to play in the selection of luminaires. Limiting the availability of ligatures may well impact on the choices that designers have, fortunately FOS Lighting curates a large range and variety of suitable luminaires across our brands.



VEKTA - V5075C



V5075C is the largest pendant and surface mounted profile in the curved range. Offering a minimum bend radius of 500mm the curved possibilities are endless.

Features

- IP20
- Custom RAL colours available on request
- Available mounting options include: Surface & Suspended options
- Plug & Play wire looms



FORMALIGHTING - Low Voltage TikTok 75

Energy-saving, track mounted on a 48V low voltage track system, with integrated driver in the track adaptor - the focus is on eco-friendly design and modularity.

Features

- Toolless, interchangeable LED module facilitates design flexibility and ease of on-site maintenance
- Versatile aiming angle tiltable 0° - 70° and rotatable 360°
- Casambi or DALI control options
- Wide range of accessories available to control light and manage glare



FREN LIGHTING - Ombre Recessed Grid

A high performing luminaire designed with a multi-functional embossed diffuser that achieves exceptional balance between efficiency and visual appeal.



Features

- Robust construction metal powder coated body IP44 rated from below and IP30 from behind
- High performance microprism centre diffuser, secondary side diffusers and outer fine rib transition diffuser
- L90 | B10 @ 60,000hrs
- Available in 3000K, standard model is 4000K



FORMALIGHTING - Spotify 100 Adj Round Trim

The Spotify product family is a small round recessed downlight providing high visual comfort thanks to a deep recessed LED Engine.

Features

- Spotify is available in Trim and Trimless
- Fixed and adjustable versions
- Modular and tool free LED-engine and optical accessories site changeable options
- CRI>90 - 98
- CCT 3000K, 4000K





Image Credit: Ecopoint

Communal Staff Areas

Free to use

The need for social interaction and an opportunity to unwind is central to the design of communal spaces. As the objective of lighting has moved from purely task orientated to a more holistic approach focusing on Health and Wellbeing and the creation of a space that people wish to visit, as opposed to have to attend for work. Lighting in communal areas does not necessarily have to conform to the requirements of operational spaces, especially within the custodial environment. In fact the farther removed from the operational space and ambience, the better, to provide staff with an opportunity to de-stress prior to going back into the population.

Depending on the nature of the space, and what it contains, it may require high CRI illumination for assisting with plant growth etc. FOS Lighting has a wide range of luminaires that can help you create the ambience that you require in the secure communal spaces within your custodial property as well as the management and control systems to adapt this lighting to the specific needs of the users for the specific outcomes required.

FREND LIGHTING - Ombre Air LED

A high performing luminaire designed with a multi-functional embossed diffuser that achieves exceptional balance between efficiency and visual appeal.



Features

- IP44 from below, IP30 from behind
- Air version has vents for push and pull airflow
- High performance microprism centre diffuser, secondary side diffusers & outer fine rib transition diffuser



FORMALIGHTING - Pixo Semi Recessed

A modern designed surface mounted ambient light with light body in extruded aluminium.

Features

- Light body available in 25mm diameter
- Optic available in narrow, medium and wide angle
- CRI>90
- CCT 3000K, 4000K, TuneableWhite
- Other CRI and CCT options available on request



ECOPOINT - G4 Panel SOLUS

The high CRI panel available in a range of form factors, has exceptional longevity, in addition they are provided with selectable power drivers to suit all needs. The quality of the light is compatible with growth applications where natural light is not readily available.



Features

- CRI>97
- UGR<19
- PMMA Light Guide Plate & Diffuser
- L80 @ 70,000 hrs (25° C)

FORMALIGHTING - Spotify 100 Surface

Ceiling mounted luminaires with simple design used to provide ambient or accent lighting. Ideal to be installed in concrete ceiling or restricted voids.

Features

- The adjustable LED module together with the future-proof modular design enables full flexibility easy installation and effortless maintenance
- High grade PMMA Lenses
- Beam angle: Narrow / Medium / Wide



FREND LIGHTING Ombre Air | FORMALIGHTING Pixo Semi-Recessed | ECOPOINT G4 Panel SOLUS | FORMALIGHTING Spotify 100 Surface | MEGABAY Aquavis | FORMALIGHTING TicTok 58 | FORMALIGHTING Spotify Square Concave



Image Credit: Non Stop Media

Amenities

Supporting staff and visitor hygiene

An integral part of providing amenities is the provision of ablution and refreshment facilities. These can be further divided into those provided for inmates and those provided for staff and visitors. The nature of custodial facilities and the associated shift work leads to the provision of ablution facilities in addition to standard toilets. These spaces require illumination that can withstand steam, moisture, and temperature variation. They also need to be able to be wiped down or cleaned with chemical cleaning agents.

Within the custodial spaces these luminaires also need to meet anti-ligature as well as anti-vandal requirements.

FOS Lighting represents and manufactures several ranges of luminaires suitable for these diverse environments. Ranging from vandal resistant to architecturally designed, FOS has luminaires that are compatible with a vast range of conditions that can be found across and even within individual facilities.



VEKTA
VVB1010



FORMALIGHTING
Bullet Recessed 127



FORMALIGHTING
Aqualuce Round



SECURLITE
Senspot



FORMALIGHTING
Aqualuce Square



SECURLITE
Bang



MEGABAY
Orbica



VEKTA - VVB1010

Vekta Flex Micro suited to wet environments.

Features

- IP68
- IK08
- Minimum bend diameter = 150mm
- Vertical Bend
- Dimmable

FORMALIGHTING - Bullet 127 Recessed

Recessed luminaire with light housing in aluminium extrusion with toughened safety glass lens.

Features

- Weatherproof durable silicone gasket
- External screws made of stainless steel
- Ring and back plug cover in cast aluminium
- CRI > 90, 95
- CCT 3000K, 4000K
- Other CRI and CCT options available on request



FORMALIGHTING - Aqualuce Round

An ideal lighting system for areas with water splashes or where condensation occurs.

Features

- Equipped with silicone water seal
- Independent light body in steel
- IP54 (protection against dust and water) fixture
- Easy relamping via removable front ring by snap-in catch action



SÉCURLITE - Senspot

Extra-compact LED downlight with detection.

Features

- Impact-resistant flush-mounting spot.
- IP44 version: remote IP20 power supply.
- Remote-control sensor adjustment.
- VK21 (see matrix under Vandal Proof)



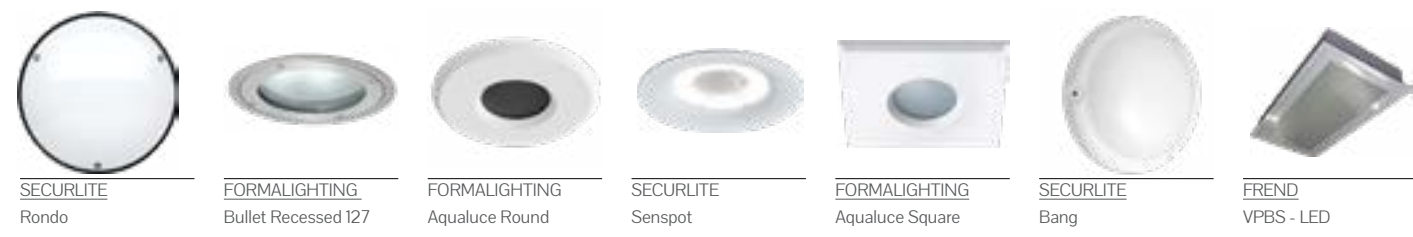


Image Credit: LA Times

Inmate Amenities

Safe hygiene facilities

Safe shared hygiene amenities are essential in custodial spaces such as police stations, correctional facilities and detention centers. These environments house a diverse population, often in close quarters, making the maintenance of hygiene and sanitation a top priority for both the well-being of inmates or detainees and the staff responsible for their care. First and foremost, custodial spaces must provide access to clean and well-maintained restroom and bathing facilities. These amenities should be equipped with anti-ligature fixtures to prevent self-harm. Regular cleaning schedules and thorough sanitation procedures are imperative to prevent the spread of infectious diseases. This implies that fixtures and fittings require suitable IP ratings and should be made from materials that can withstand the effects of chemical cleaning agents used on a regular basis. Safe shared hygiene amenities in custodial spaces are not only a matter of public health but also a human rights issue. Properly maintained facilities, coupled with education and access to essential hygiene items, can significantly improve the living conditions and health outcomes of those within these environments. FOS Lighting provides access to a range of luminaires that meet all the requirements for these areas.



SÉCURLITE - FORMALIGHTING

A luminaire ideally suited to environments subject to vandalism, thanks to its exceptional impact resistance, up to 50 joules IK10+.



Features

- Low-consumption vandal-resistant architectural luminaire
- Increased strength IK11 | 50 J
- Reinforced polyamide base
- Opal polycarbonate diffuser (for LED version)
- CCT 4000K
- CRI>80
- Stainless steel vandal-resistant screws

FRENED - VPBS LED

LED Plaster Recessed Vandal Resistant - IP65 Sealed Troffer.

Features

- High impact 6mm polycarbonate lens panel and diffuser in sealed metal frame fixed with security screws
- Heavy Duty neoprene gasket ensures positive diffuser frame seal
- Efficacy, up to 136 lm/W
- Futureproof replaceable gear tray
- CRI>80
- Inverted diffuser in screw fixed frame



SÉCURLITE - Rondo

Surface or flush mounted, among the most powerful and robust of the architectural luminaires.



Features

- Architectural luminaire, 120-joules resistance
- Available in two sizes
- Die-cast marine-grade aluminium base
- Opal polycarbonate diffuser
- CCT 4000K | CRI>80
- Stainless steel vandal-resistant screws.
- Plug-in gear tray
- VK65 [wall] (see matrix under vandal proof)
- VK66 [ceiling + flush] (see matrix under vandal proof)

FORMALIGHTING - Bullet 127 Recessed

Recessed luminaire with light housing in aluminium extrusion with toughened safety glass lens.

Features

- Weatherproof durable silicone gasket
- External screws made of stainless steel
- Ring and back plug cover in cast aluminium
- CRI>90, 95
- CCT 3000K, 4000K
- Other CRI and CCT options available on request





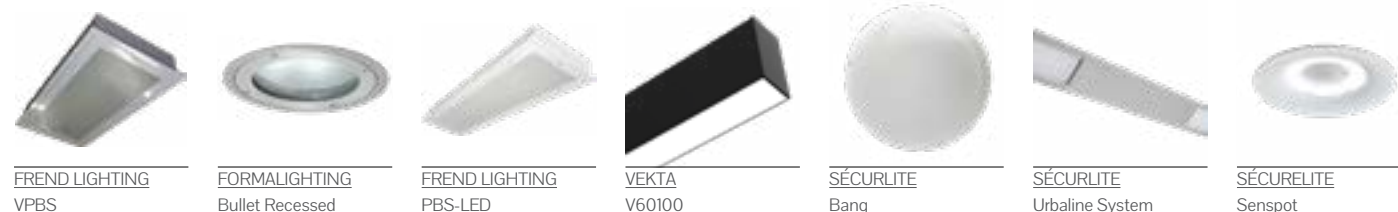
Image Credit: Ivan Aleksic unsplash.com

Education Facilities

Flexible well lit spaces

Lighting plays a crucial role in educational and facilities located within custodial spaces, the new methodologies in education mean that these spaces need to be flexible in their usage. These spaces, require careful consideration when it comes to lighting design, as it can significantly impact the well-being and productivity of individuals within these environments as well as how flexible the space is in its usage. Firstly, appropriate lighting enhances safety and security within custodial spaces. Well-lit areas provide better visibility, reducing the risk of accidents, conflicts, or illicit activities. Adequate lighting ensures that educators, conference participants, and custodial staff can navigate the space effectively, promoting a secure and controlled environment. Secondly, proper lighting positively affects learning and communication within education facilities, to this end it needs to be adaptive to the use the space is put to, whether it is more traditional, or more organic small group usage. Well-designed lighting adapts to the 'scene' and helps maintain focus and attention, supporting the cognitive processes necessary for effective teaching and learning. It reduces eyestrain, headaches, and fatigue, creating a comfortable environment that enhances information retention and engagement. Similarly, during conferences and meetings, adequate lighting fosters clear communication, enabling participants to exchange ideas and collaborate effectively.

Appropriate lighting can also contribute to the overall well-being and mental health of individuals in custodial spaces. Natural light, when available, has been proven to have a positive impact on mood, circadian rhythms, and sleep patterns. High CRI LED luminaires and Human Centric Lighting solutions can contribute to achieving these outcomes. By considering lighting design as an integral part of these spaces, we can create environments that are conducive to growth, development, and positive interactions, even within custodial settings. FOS Lighting can provide not just the luminaires but also a range of control and management solutions to allow the luminaires to serve multiple roles in numerous ways.



FRENDELIGHTING - VPBS

Plaster recessed, vandal resistant IP65 rated sealed troffer luminaire.

Features

- High impact 6mm polycarbonate lens panel and diffuser in sealed metal frame fixed with security screws
- Heavy Duty neoprene gasket ensures positive diffuser frame seal - suitable for hospitals, laboratories etc
- L80 @ 70,000 hrs
- Futureproof replaceable gear tray
- Available in DALI dim or Switch dim
- Wide choice of diffusers available



FRENDELIGHTING - SPF-LED

Surface mounted Vandal proof security luminaire.

Features

- Internal body fabricated from 1.2mm steel finished in white powder coat
- High impact UV stabilized polycarbonate diffuser fixed with tamper-proof screws
- Impact tested by QUT (Test No 5158)
- IP54 weatherproof version available (WSPF-LED)
- 200mm LED night light available



VEKTA - Extreme

IP66 | IK10 vandal resistant linear extrusion. VEKTA Extreme (VX) is breaking the barrier of Aesthetic IP and IK rated fittings.

Features

- Up to 3.5 meters seamless section
- Compact external profile, clear anti-yellowing polycarbonate internal extrusion houses the electronics
- Permits single linear solution indoors and outdoors
- Australian designed and assembled



FRENDELIGHTING - PBS-LED

PBS is a plaster sealed troffer.

Features

- Future proof replaceable gear tray
- Heavy duty neoprene gasket ensures positive seal
- Inverted diffuser in screw fixed frame
- Diffuser frame is connected to the body by safety lanyards
- High CRI available upon request
- Clinical observation available upon request





Image Credit: Ecopoint

Specialist Class Rooms

Ensuring a trigger-free environment.

When dealing with students with disabilities such as being on the ASD spectrum or suffering from epilepsy, the environment becomes a very important variable in assisting with creating an enabling space for the educational endeavour. Light sensitivity takes on numerous forms and various issues can act as triggers, certainly near the top of that list would be flicker. In LED lighting flicker occurs as a result of modulating the current to electric light sources. Even though the human visual threshold is about 50Hz, if a light source is flickering faster than 50 times per second, this sub-tropic flicker can still have a negative impact on health, wellness, and productivity.

Most FOS Lighting luminaires offer low-flicker operation providing you with the confidence to place the luminaires in the Special Education spaces. When comparing fittings with other manufacturers we recommend that you check the drivers associated with them for flicker.

FREND LIGHTING - OMBRE

OMBRE is a high performing luminaire designed with a multi functional embossed diffuser that achieves exceptional balance between efficiency and visual appeal.



Features

- CRI>80
- IP44 from below, IP30 from above
- L90 | B10 @ 60,000 Hours
- 5 Year warranty
- 3000K or 4000K options



VEKTA - Extreme

IP66 | IK10 vandal resistant linear extrusion. VEKTA Extreme (VX) is breaking the barrier of Aesthetic IP and IK rated fittings.

Features

- Up to 3.5 meters seamless section
- Compact external profile, clear anti-yellowing polycarbonate internal extrusion houses the electronics
- Permits single linear solution indoors and outdoors
- Surface mounted solution
- Australian designed and assembled



FREND - PBS LED

IP65 LED Plaster Sealed Troffer.



Features

- Future proof replaceable gear tray.
- Heavy duty neoprene gasket ensures positive seal.
- Inverted diffuser in screw fixed frame. Vandal resistant option available.
- Diffuser frame is connected to the body by safety lanyards.



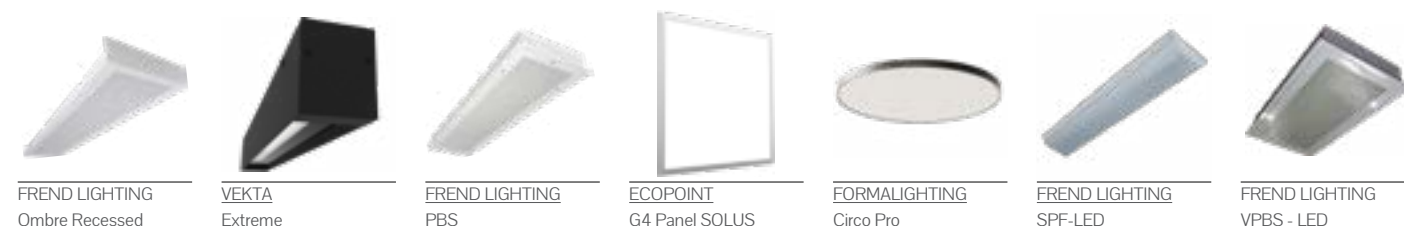
ECOPOINT - G4 Panel SOLUS

The high CRI panel available in a range of form factors, has exceptional longevity, in addition they are provided with selectable power drivers to suit all needs. The quality of the light is compatible with growth applications where natural light is not readily available.



Features

- CRI>97
- UGR<19
- PMMA Light Guide Plate & Diffuser
- L80 @ 70,000 hrs (25° C)



FREND LIGHTING Ombre Recessed VEKTA Extreme FREND LIGHTING PBS ECOPOINT G4 Panel SOLUS FORMALIGHTING Circo Pro FREND LIGHTING SPF-LED FREND LIGHTING VPBS - LED



Image Credit: Securilite

Physical Education Spaces

Ensuring eye-hand co-ordination

FOS Lighting carries several ranges of luminaires and controls that can provide the requisite illumination for sports applications as well as the knowledge of the appropriate lighting standards (AS/NZS 2560.2.2) which will ensure that the products provided meet and exceed the requirements for the facility that is under development, both indoor and outdoor. This includes weatherproof flood lights for exterior applications as well as a range of high IP luminaires suitable for use in indoor facilities.

FOS Lighting provides luminaires with high quality optics that permit lighting designs that provide targeted, even illumination of the requisite level on the field of play. Luminaires for indoor sports environments should also control for glare and minimise flicker, to avoid dazzling or 'strobing' which would make it difficult for competitors to track the path of moving balls, shuttlecocks and other items used in the sport under review. The provided lighting should also be compatible with CCTV (eg. Cut-offs that control lens flare) as these spaces require non-stop surveillance while in use. In addition the luminaires should be compatible with control systems that allow adjustment of levels of illumination in line with the levels determined for the different sporting codes should there be competitive events hosted by the facility.



ECOPOINT Long Bay G2 ECOPOINT Linear High Bay G2 SECURLITE Fila 2 ECOPOINT High Bay G3 ECOPOINT Area Light G2 FRENED LIGHTING Onyx 2 ECLATEC Keris 2

ECOPOINT - Long Bay G2

Ecopoint's LED Long Bays are high output luminaires with a comfortable diffused appearance ideal for applications where wide distributions and wall washing is required.



Features

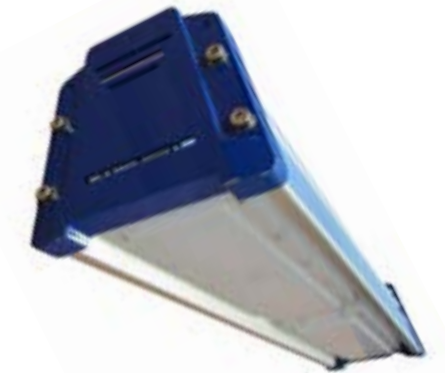
- 600mm to 1200mm luminaires
- 15,700 lumens output from 200W
- L90 @ 59,000 hours
- IP65
- IK10 across all variants
- SOLUS version: 4000K, R_a≥95, R_g≥90.

ECOPOINT - Linear Highbay

A high output LED linear alternative to standard metal halide or T5 high bays.

Features

- Ra>90
- IP65
- IK10
- L80 B10 @ 125,000 hrs
- 5 Year warranty
- 3000K, 4000K, 5000K & 6500K options



SÉCURLITE - Fila 2

High-efficacy version of the FILA luminaire, resulting from Securilite's policy of eco-design and continuous performance improvement.



Features

- Sealed vandal-resistant striplight
- Opal or clear diffuser for optics and louvres.
- Polycarbonate body, 2 mm thick.
- ISO M20 nickel-plated brass IP67 cable gland at one end.

ECOPOINT - High Bay G3

Designed to be reliable using quality componentry designed to withstand exceptionally long operating times at high temperatures,

Features

- Microwave / PIR Motion Sensor
- IP65
- IK08
- 5 years warranty (7 yrs available)
- 4000K (5000K optional)
- 90° & 120° optic available
- 100, 150 & 200 Watt options





Image Credit: FOS Lighting

Workshop Areas

Manual Skills Development

Proper lighting is an essential component of productivity, safety, and creativity. It isn't a luxury but a necessity that impacts work quality, artisan and supervisor safety, and process efficiency within a workshop environment. Adequate task illumination reduces errors and enhances accuracy, yielding better results. Custodial workshops involve potentially hazardous tools and materials. Adequate lighting ensures that supervision is effective, whether human or video. The luminaires also need to provide a high level of vandal resistance and should be designed to be anti-ligature, additionally the use of flicker free luminaires that also control for glare, avoids dazzling or 'strobing' which would make it difficult to detect moving objects and increase the risk of accidental injury.

FOS Lighting provides luminaires with high quality optics that permit lighting designs that provide targeted, even illumination of the requisite level on workpieces. In addition the luminaires should be compatible with control systems that allow adjustment of levels of illumination in line with the levels required for the types of tasks being undertaken, especially if the space has multiple uses.

The provided lighting should also be compatible with CCTV (eg. Cut-offs that control lens flare) as these spaces require non-stop surveillance while in use. FOS Lighting curates several ranges of luminaires that meet these divergent requirements while maintaining low operational costs and and exceptional longevity.



ECOPOINT Skleros Tri-Proof FREN LIGHTING PBS - LED FREN LIGHTING VPBS SÉCURLITE Bang ECOPOINT Batten G3 FREN LIGHTING OSIK 44 VEKTA Extreme

ECOPOINT - Skleros Tri Proof

A rugged construction with high protection ratings has been paired with a modular design & extra flexibility, to further improve usability and reliability.



Features

- Replaceable/ upgradeable light engines and drivers simplify maintenance and extend product service-life
- Surface-mounted or suspended as standard
- Integrated microwave sensor optional

FREN LIGHTING - PBS

IP 65 LED plaster sealed troffer.

Features

- Futureproof replaceable gear tray
- Heavy duty neoprene gasket ensures positive seal
- Inverted diffuser in screw fixed frame
- Diffuser frame is connected to the body by safety lanyards
- High CRI available upon request



FREN - VPBS LED

LED Plaster Recessed Vandal Resistant - IP65 Sealed Troffer.



Features

- High impact 6mm polycarbonate lens panel and diffuser in sealed metal frame fixed with security screws
- Heavy Duty neoprene gasket ensures positive diffuser frame seal
- Efficacy: up to 136 lm/W
- Futureproof replaceable gear tray
- CRI>80
- Inverted diffuser in screw fixed frame



SÉCURLITE - Bang

A luminaire ideally suited to environments subject to vandalism, thanks to its exceptional impact resistance, up to 50 joules IK10+.

Features

- Low-consumption vandal-resistant architectural luminaire
- Increased strength IK11 | 50 J
- Reinforced polyamide base
- Opal polycarbonate diffuser (for LED version)
- CCT 4000 K
- CRI>80
- Stainless steel vandal-resistant screws





Image Credit: Ecopoint

Examination Rooms

Diagnostic and recovery support

When dealing with ill inmates, the environment becomes a very important variable, luminaires within this space aid the examiner in making an accurate diagnosis. Ideally the diagnostic space should have access to illumination that is compatible with the Cyanosis Observation Index while meeting the requirement of being vandal proof and preferably anti-ligature. These luminaires should ideally also be flicker free as flicker:

- * Can induce seizures in people with photosensitive epilepsy.
- * Can contribute to headaches, eye strain, and fatigue.
- * Is a visual trigger that studies show can account for 38% of reported migraines.
- * Can negatively impact individuals with autism due to their visual hypersensitivity, with lighting triggers heightening symptoms, all of which could complicate the process of diagnosis and treatment.

FOS Lighting has an extensive range of products developed with the needs of the healthcare sector in mind.



FRENDS
PBS - LED

FRENDS
SMS

FRENDS
TBS - LED

FRENDS
VPBS - LED

ECOPOINT
G4 Panel SOLUS

FRENDS LIGHTING
SPF-LED

FRENDS LIGHTING - PBS

IP65 LED Plaster Sealed Troffer.



Features

- Future proof replaceable gear tray
- Heavy duty neoprene gasket ensures positive seal
- Inverted diffuser in screw fixed frame
- High CRI available upon request
- Clinical observation available upon request



FRENDS LIGHTING - SMS LED

LED Surface Mount Troffer.

Features

- Heavy duty neoprene gasket ensures dust, insect and splash proof sealed for hospitals and clean rooms
- Inverted diffuser in a screw fixed frame
- High CRI available upon request
- IP65 if surface mounted and sealed to the ceiling



FRENDS LIGHTING - TBS LED

LED Sealed T-Bar Luminaire.



Features

- SELV
- Future proof replaceable gear tray
- Recessed luminaire designed for 1200 x 600 standard 38mm high T-Bar ceilings
- Inverted diffuser provides a smooth surface for ease of cleaning
- Diffuser is in a sealed frame screw fixed to the luminaire body
- A heavy duty neoprene gasket seals the diffuser frame to the T-Bar ceiling
- High CRI available upon request



FRENDS LIGHTING - VPBS-LED

LED Plaster Recessed Vandal Resistant - IP 65 Sealed Troffer.

Features

- High impact 6mm polycarbonate lens panel and diffuser in sealed metal frame fixed with security screws
- Heavy Duty neoprene gasket ensures positive diffuser frame seal
- Efficacy: up to 136 lm/W
- Futureproof replaceable gear tray
- Inverted diffuser in screw fixed frame
- CRI>80





Image Credit - Ecopoint

Recovery

Control for optimal recovery

Lighting can have a key impact in reducing the time it takes for patients to return to 'normal' health. Simulating natural daylight conditions can help support patient mood, sleep, and overall recovery. Having the right light with the right level of control can help synchronise and work in harmony with our biological rhythm, adding to the comfort, experience and wellbeing of both patients and staff.

When dealing with inmate recovery, either in custodial facilities or regional hospitals, these luminaires should also be vandal resistant as well as anti-ligature.

FOS Lighting offers a range of control solutions to suit not only patients, visitors, and staff's wellbeing, but also the budget. Thanks to the ability to manufacture custom designed luminaires all these divergent requirements can be met. Alternatively, FOS represents brands that specialise in meeting these specifications.



VEKTA Extreme

FREND LIGHTING PBS

FREND LIGHTING TBS-LED

FREND LIGHTING VPBS

SECURLITE Bang

FREND LIGHTING SPF-LED

SECURLITE Urbaline System

VEKTA - Extreme Wall Mount

IP66 | IK10 vandal resistant linear extrusion. VEKTA Extreme (VX) is breaking the barrier of Aesthetic IP and IK rated fittings.



Features

- Up to 3.5 meters seamless section
- Compact external profile, clear anti-yellowing polycarbonate internal extrusion houses the electronics
- Permits single linear solution indoors and outdoors
- Wall Mounted Solution
- Australian designed and assembled



FREND LIGHTING - PBS

IP65 LED Plaster Sealed Troffer.

Features

- Future proof replaceable gear tray
- Heavy duty neoprene gasket ensures positive seal
- Inverted diffuser in screw fixed frame
- High CRI available upon request
- Clinical observation available upon request



FREND LIGHTING - TBS LED

LED Sealed T-Bar Luminaire.



Features

- SELV
- Futureproof replaceable gear tray
- Recessed luminaire designed for 1200mm x 600mm standard 38mm high T-Bar ceilings
- Inverted diffuser provides a smooth surface for ease of cleaning
- Diffuser is in a sealed frame screw fixed to the luminaire body
- A heavy duty neoprene gasket seals the diffuser frame to the T-Bar ceiling
- High CRI available upon request



FREND LIGHTING - VPBS-LED

LED Plaster Recessed Vandal Resistant - IP 65 Sealed Troffer.

Features

- High impact 6mm polycarbonate lens panel and diffuser in sealed metal frame fixed with security screws
- Heavy Duty neoprene gasket ensures positive diffuser frame seal
- Efficacy: up to 136 lm/W
- Futureproof replaceable gear tray
- Inverted diffuser in screw fixed frame
- CRI>80





Image Credit: Securlite

Mental Health

High protection, high safety

When it comes to Mental Health, especially in a custodial environment, both the security and comfort of patients and staff is imperative. The selection of tamper & vandal resistant luminaires with anti-ligature features provide safety, while the quality, output, and colour rendering of a luminaire adds to the occupant's sense of harmony, security, and assists with overall recovery.

The management of these at-risk patients' circadian rhythms is an important element of their management while on the ward and contributes to providing an inviting environment for their speedy recovery. FOS Lighting has an extensive portfolio of luminaires suited for secure facilities, providing effective, suitable illumination as well as safety and security.

SÉCURLITE - Urbaline System

Customisable anti-ligature system designed to fit into corners.



Features

- Vandal-proof screw option
- Polycarbonate high impact lens cover
- System is flexible and permits custom, unique solutions based on project requirements
- Detail your project and the Design Office will be able to offer you specific solutions to suit your requirements

SÉCURLITE - P600

Bedhead fitting for prison cells.

Features

- Body in ZP 10/10 steel
- Frame in ZP 15/10 steel
- Opal polycarbonate diffuser
- CCT 4000 K, CRI>80
- Stainless steel vandal-resistant switch
- Rip-out resistant
- VK36 (see matrix under vandal proof)



SÉCURLITE - Rondo

Surface or flush mounted, among the most powerful and robust of the architectural luminaires.



Features

- Architectural luminaire, 120-joules resistance
- Available in two sizes
- Die-cast marine-grade aluminium base
- Opal polycarbonate diffuser
- CCT 4000 K | CRI>80
- Stainless steel vandal-resistant screws
- Plug-in gear tray
- VK65 [wall] (see matrix under vandal proof)
- VK66 [ceiling + flush] (see matrix under vandal proof)

SÉCURLITE- Titan Video Surveillance

A comprehensive range of steel luminaires designed to conceal a video surveillance camera.

Features

- Comes in a 45° & a 30° degree module option
- Braced opal polycarbonate diffuser
- Hidden video camera
- Stainless steel vandal-resistant screws
- IK11
- IP65



SÉCURLITE Urbaline System SÉCURLITE P600 SÉCURLITE Rondo SÉCURLITE Titan Video Surveillance SÉCURLITE Bang SÉCURLITE Senspot SÉCURLITE Sofite



Image Credit: pexels.com Timur Saglambilek

Food Service Spaces

Lighting the full range of work surfaces.

In institutions where food preparation is conducted, it is essential that the luminaires installed in the kitchen areas provide high quality, even light on food prep surfaces and are capable of being cleaned using chemical detergents. Within custodial environments the luminaires also have to be vandal resistant as well as anti-ligature in nature. The luminaires that provide light to stoves and other heat sources where steam and other updrafts can affect them have to be designed to be cleaned with pressure cleaning equipment and chemical detergents.

Cold rooms also require illumination, and it is essential that the luminaires used in these spaces can operate in a range of conditions down to -40°C and can handle varying degrees of moisture in the environment. FOS Lighting supplies several families of IP65+ products suited to kitchen applications and Tri-Proof type luminaires perfect for use in Cold Rooms. These can be adapted to meet the particular requirements of the kitchens in an custodial environment.

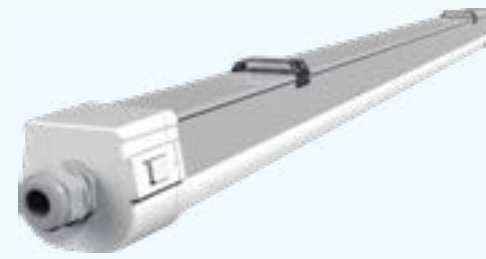
Alternatively FOS is the accredited representative of a number of brands that are specifically designed for the challenges experienced in the custodial environment. Alternatively FOS is the accredited representative of a number of brands that are specifically designed for the challenges experienced in the custodial environment.



ECOPOINT Skleros ECOPOINT Food Service High Bay FRENDR LIGHTING VPBS - LED ECOPOINT Tri-Proof Plus FRENDR LIGHTING PBS - LED SECLRLITE Rondino FRENDR LIGHTING SMS - LED

ECOPOINT - Skleros Tri-Proof

A rugged construction with high protection ratings has been paired with a modular design & extra flexibility, to further improve usability and reliability.



Features

- Replaceable/ upgradeable light engines and drivers simplify maintenance and extend product service-life
- Surface-mounted or suspended as standard
- Integrated microwave sensor optional
- Polycarbonate Body and Lens

ECOPOINT - Food Service High Bay (PM?)

Designed for ease of cleaning with a Polycarbonate optic.

Features

- Non-toxic corrosion resistant aluminum exterior
- Complete smooth surface for easy cleaning
- IP69 rated for most environmental conditions
- Suitable for high humidity, wash down capable
- High quality polycarbonate optics
- Notably low glare rating
- No exposed hardware as per FDA regulations
- Dual cable entry for optional dimming



FRENDR LIGHTING - VPBS-LED

LED Plaster Recessed Vandal Resistant - IP 65 Sealed Troffer.



Features

- High impact 6mm polycarbonate lens panel and diffuser in sealed metal frame fixed with security screws
- Heavy Duty neoprene gasket ensures positive diffuser frame seal
- Efficacy: up to 136 lm/W
- Future Proof Replaceable Gear Tray
- Inverted diffuser in screw fixed frame
- CRI>80



ECOPOINT - TRI PROOF PLUS

A unique design intended for easy cleaning using quality materials.

Features

- Endcaps in 316 Stainless Steel
- Body in PMMA or optional Polycarbonate
- Surface mount or suspended
- Available in 600, 900, 1200 and 1500mm options
- L80 | B10 @ 50 000hrs

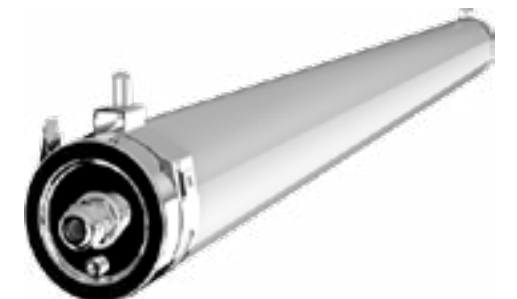




Image Credit: pexels.com Karolina Grabowska

Janitorial Spaces

Ensuring staff effectiveness

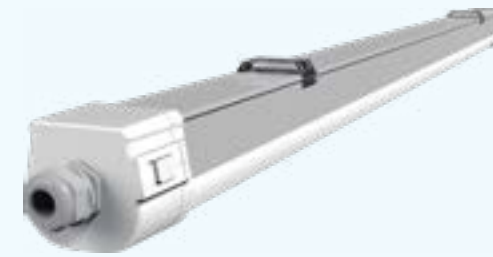
Custodial facilities require substantial cleaning effort, especially with the risk of recurring Covid epidemics due to the fact that inmates interact with each other and staff in a constrained environment and therefore the risk exists that cross contamination happens with the facility being a "hub" of sorts for the dissemination of disease.

This requires that the janitorial services deal with products of somewhat caustic and possibly an aerosol nature. It becomes essential that lighting in the spaces where these products are stored and mixed be of a high IP nature and permit staff to mix chemicals accurately. This means that in addition to being sealed, the luminaires also need to control glare and flicker.

FOS Lighting provides a range of options that meet these requirements and will ensure that janitorial services are conducted to the best possible standards.

ECOPOINT - Skleros Tri-Proof

A rugged construction with high protection ratings has been paired with a modular design & extra flexibility, to further improve usability and reliability.



Features

- Replaceable/ upgradeable light engines and drivers simplify maintenance and extend product service-life
- Surface-mounted or suspended as standard
- Integrated microwave sensor optional
- Polycarbonate Body and Lens

FREND LIGHTING - VPBS-LED

LED Plaster Recessed Vandal Resistant - IP 65 Sealed Troffer.

Features

- High impact 6mm polycarbonate lens panel and diffuser in sealed metal frame fixed with security screws
- Heavy Duty neoprene gasket ensures positive diffuser frame seal
- Efficacy: up to 136 lm/W
- Future Proof Replaceable Gear Tray
- Inverted diffuser in screw fixed frame
- CRI>80



FREND LIGHTING - MR Bulkhead

Exterior Bulkhead that can be wall or surface mounted.



Features

- Die-cast aluminium body
- Polycarbonate diffuser
- Silicone gaskets
- Integral control gear
- Black powder coat finish, other colours available on request
- LED option, L75 | B50@50,000 hrs
- PLC available on request

FREND LIGHTING - PBS

IP 65 LED Plaster Sealed Troffer.

Features

- Future proof replaceable gear tray
- Heavy duty neoprene gasket ensures positive seal
- Inverted diffuser in screw fixed frame
- High CRI available upon request
- Clinical observation available upon request





Paths & Walkways

Welcoming, visible & secure

Lighting designed for pedestrian walkways is “to assist pedestrians to orientate themselves, detect potential hazards, reduce fear of crime & protect the integrity of the night time environment through control of obtrusive light and glare.” This is even more relevant in an adverse and custodial environment. (AS/NZS 1158.3) The principal design objectives for Category P lighting are to provide the following:

- (a) Illuminance and uniformity of illuminance over the designated area to a specified level.
- (b) Glare control to a specified level.
- (c) Limitation of upward light from luminaires to a specified level.
- (d) Limitation to a specified level of the obtrusive light into properties that abut the lit area.
- (e) A lighting scheme that conforms to this Standard at all times during each maintenance cycle over the life of an installation.
- (f) Minimization of energy consumption.

In the custodial environment there is the added requirement of observation and security.

FOS Lighting provides several streetlights and urban lighting poles that provide well designed optics to provide safe movement across institutions. FOS Lighting ensures that all the solutions provided are compatible with the requirements of AS/NZS as well as meeting the relevant Dark Sky and obtrusive light limitations.



ECLATEC - Team Bollard

Designed to assist with wayfinding and to prevent vehicular access to cycleways and pedestrian walkways.



Features

- Aluminium profile 200 mm tube
- Die-cast aluminium cap, polycarbonate bowl
- Polyester powder coating finish, choice of colours
- IP66 Module
- IK10 | 60J
- CCT 3000K, 4000K

ECLATEC - Item

Item is adaptable to horizontal and vertical pole insertion, extender suspension and wall mounted extension, in addition to being adaptable to pedestrian uses via pole top enclosed bowl options.

Features

- 3 plate designs; Triad, Smooth & Honeycomb
- Toolless entry
- Regional and Urban routes, pedestrian walkways, cycle paths, squares, parks and pedestrian areas
- IP 66
- IK Flat (VPC): IK 09 | Deep bowl (PHC): IK 10



ECLATEC - Link

Flexible range of modern adaptable pole top luminaires designed to fit into any pedestrian environment.



Features

- IP66 waterproofing
- Breathing system with activated carbon filter
- Base, cover and arm in injected die-cast aluminium
- Choice of four polycarbonate bowls: deep clear, deep structured, shallow clear and shallow opaline
- IK10 | 50J
- CCT 3000K, 4000K

SÉCURLITE - Titan Angle

Titan angle is a comprehensive range of steel luminaires designed to withstand large amounts of vandalism, ideal for high traffic covered walkways.

Features

- Wall mounted, 45° & 30° degree option available
- Braced opal polycarbonate diffuser
- Stainless steel vandal resistant screws
- IP65
- IK11





Courtesy of: Eclatec

Car Parks

Ensuring safety after dark

Parking complexes can be an unnerving and difficult environment to navigate, and even worse when at night. A well designed lighting solution should offer ample light, in addition, individual sensors that rely on ambient light and motion detection can maintain a lower OpEx associated with the installation by increasing energy savings while maximising pedestrian visibility when moving to and from a vehicle.

When the car park is associated with a custodial facility ensuring high quality lighting – along borders that abut the facility, and for CCTV coverage of activity in the parking lot is essential. This provides security to visitors and staff and minimizes anti-social behaviour, always a risk in these situations where the possibility of gang related activity is heightened. This is also why the illumination that is supplied needs to be vandal resistant.

FOS Lighting offer a range of exterior parking solutions, which are weatherproof, reliable, and efficient.

ECLATEC - Stelium

Toolless entry luminaire available in 3 distinct models depending on client needs.



Features

- Adjustable current
- Dimming via bluetooth or bottom of pole
- DALI protocol
- Smart Ready (R) configuration (ZD4i)
- Remote management via WIZARD CMS system

ECLATEC - Pixel

Eclatec Pixel is a pole mounted luminaire designed for illuminating large open spaces, such as rooftop and outdoor car parks.

Features

- IP66
- IK09
- Any colour finish available
- Extruded silicone gaskets



ECLATEC - Zelda

Zelda is an exterior pole mounted luminaire designed for urban environments to illuminate streets, pathways and other residential zones and walkways.

Features

- IK10
- IP66
- Available in S and X Modules
- X modules designed for easy maintenance.
- Available in three sizes
- Die-cast aluminium for durability
- A variety of colour options available
- Extruded silicone seals for added protection



ECLATEC - Elipt

A design of subtle modernism ensures a wide range of applications with a range of mounting options. Applicable to roads, secondary urban and inter-urban streets.

Features

- Mounting: top, bitop and side entry
- Body and frame in injected die-cast aluminium with spun aluminium dome
- IK08
- CCT 2400K, 2700K, 3000K or 4000K
- Bowl in thermally tempered glass



ECLATEC Stelium EREND LIGHTING SMHF-LED EREND LIGHTING SPF-LED ECLATEC Pixel ECLATEC Stelium ECLATEC Zelda ECOPOINT Area Light G2

FOS Projects

ADELAIDE REMAND CENTRE

ALEXANDER MACONOCHIE CENTRE (ACT)

ARTHUR GORRIE CORRECTIONAL CENTRE

AUSTRALIAN FEDERAL POLICE DARWIN AIRPORT

AUSTRALIAN INSTITUTE OF POLICE MANAGEMENT

BALLARAT POLICE STATION

BELMONT POLICE STATION

BRISBANE YOUTH DETENTION CENTRE

BURKETOWN POLICE STATION

CARINGBAH TRAFFIC POLICE

CESSNOCK CORRECTIONAL CENTRE

CHISHOLM ROAD PRISON

DEVENPORT POLICE STATION

FRASER COAST MENTAL HEALTH - HERVEY BAY HOSPITAL

GOLD COAST POLICE STATION

GUNNEDAH POLICE STATION

INDOORPILLY POLICE STATION

KARANA DOWNS POLICE STATION

MANUKAU POLICE STATION (NZ)

MURDOCH POLICE STATION

NORTHFIELD PRISON, (SA)

NSW POLICE STATION - POTTS HILL

NSW POLICE- REDFERN

OTAHUHU POLICE STATION (NZ)

PARKES POLICE STATION

POLICE ACADEMY SA

PORT AUGUSTA PRISON (SA)

QUEANBEYAN POLICE STATION

SOUTH COAST CORRECTIONAL CENTRE - NOWRA

SOUTHERN QUEENSLAND CORRECTIONAL PRECINCT (SQCP)

ST MARYS POLICE STATION

SUNBURY POLICE STATION

RIVERSTONE POLICE STATION

ROLLINGSTONE POLICE STATION

WAGGA WAGGA MENTAL HEALTH HOSPITAL

WATER POLICE - PYRMONT

WOODFORD PRISON SPF

YAMANTO POLICE STATION

YATALA LABOUR PRISON (SA)

333 POLICE ROAD, CALIBRE CAPITAL





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FOS Lighting reserves the right to make any changes without prior notification