



LIGHTING

SOLUTIONS CATALOGUE

a world of energy

LIGHTING DESIGN SERVICE

From initial conception to project handover and every step along the way our expert team are on hand to offer high value engineering solutions, delivered on time, within budget and to your satisfaction.

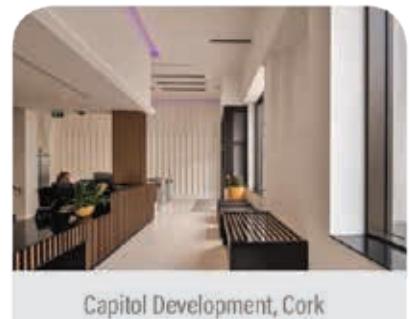
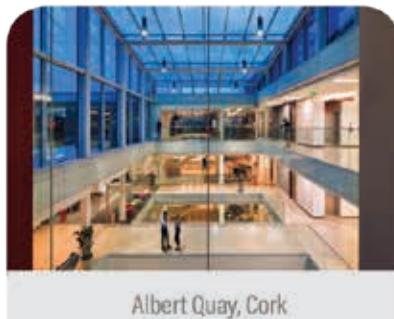
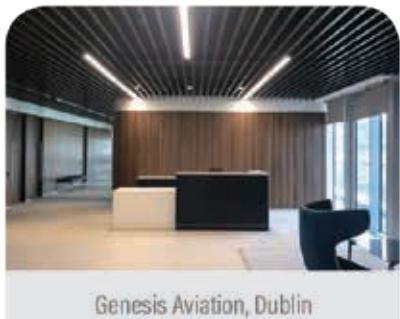
Our core areas of expertise are commercial, medical, pharmaceutical, retail, education, high end residential and sports pitches. And the best part of our lighting design service is, it's absolutely free of charge.

WE USE THE FOLLOWING BRAND OF DESIGN SOFTWARE:

- DIALux / RELUX
- Lighting Reality - Public Lighting Layouts Created for County Council Approval
- 3D Simulations - Using Sketchup & Vray
- AutoCAD

WE ALSO OFFER THE FOLLOWING:

- Simulation of ambient conditions
- Daylight calculations
- Full documentation of all calculations
- Formatted according to preference
- A lighting solution for every project and budget
- With a full lighting control offering to suit (including wireless)
- CPD Training Registered Provider
- Construction Product Regulations (CPR) for Structured Cabling
- BS EN 62305 Protection Against Lightning
- Solar PV - overview and system design
- Leading the rEVolution - An introduction to Commercial Electric Car Charging and Payment processing



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THE POWER OF TRUSTED BRANDS



Fosnova



AURORA®
LIGHTING GROUP



PHILIPS

Beghelli

:hager

ROBUS®

BRITICENT
SITE ELECTRICS

LEDVANCE

(s)ignify

CREE ▲

luceco



disano
illuminazione

LUG®

PRELUX
LED PRODUCTS

SGD

Piltown
ENGINEERING

THE BENEFITS OF LED LIGHTING



Improved quality, efficiency and performance



Instant on flicker free light.



Energy saving of up to 93%



Easy installation and retrofitting - 1:1 replacement for traditional products.



Environmentally friendly - LEDs do not contain any harmful materials, making them easier to dispose of and give out no UV or IR emissions.



A quick initial payback on investment.



Ongoing long-term energy and cost savings for your business.



LEDs last significantly longer than traditional lamps, so maintenance costs are significantly reduced.

TRAFFIK R LED

Professional streetlight luminaire for LED light sources.

Technical Data

Mounting	on outriggers ø60/48mm, on pillar ø60/48mm
Body	high pressure die-cast aluminum
Colour	grey
Lifetime (L80B10)	100,000h
CRI	>70
Efficacy	131 lm/W
Operating temp. range	-40 °C ... +50 °C



Product Codes

Description

2763150	130292.5L021.011 TRAFFIK R LED ED 4600LM/740 IP66 027 GREY
2763151	130292.5L031.011 TRAFFIK R LED ED 6900LM/740 IP66 027 GREY
2763152	130292.5L041.011 TRAFFIK R LED ED 9000LM/740 IP66 027 GR
2763154	TRAFFIK R LED ED 6900LM/740 IP66 027 GREY W/NEMA SOCKET
2763155	TRAFFIK R LED ED 9000LM/740 IP66 027 GREY W/NEMA SOCKET

URBINO LED

Technical Data

Lifetime	100,000h
Colour Temperature	3000K, 4000K, 5700K
Colour	grey, also available in graphite
Efficacy	124 lm/W
CRI	>70



Product Codes

Description

2763121	URBINO LED 55W 6250LM/757 GREY
2763122	URBINO LED 84W 10000LM/757 07 GREY
2763123	URBINO LED 110W 13300LM/757 07 GREY
2763124	URBINO LED 55W 6250LM/757 07 GREY W/PHOTOCELL
2763125	URBINO LED 84W 10000LM/757 07 GREY W/PHOTOCELL
2763126	URBINO LED 110W 13300LM/757 07 GREY WPHOTOCELL

DISANO MINI STELVIO

Technical Data

Housing and cover	Die-cast aluminium
Pole connection	Die-cast aluminium



Product Codes

Description

2563160	3275 330361-00 MINI STELVIO
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DISANO CLIMA

EXTERNAL LIGHTING

Technical Data

Housing	Die-cast aluminium
Cover	in aluminium plating
Difusser	In shatterproof and self-extinguishing V2 UV-stabilised polycarbonate



5YR WARRANTY **35W** **IP 65** **IK 08** **4392 LM** 

Product Codes	Description
2563594	1517 422373-00 CLIMA LED 35W CLD CELL GRAPHITE

AVENIDA LED

For pedestrian zones graphite II. Park luminaire in modern form for LED light sources.

Optical Data

Light distribution	omnidirectional
Way of lighting	direct
Type of optic	017 - for pedestrian zones
Diffuser	polycarbonate
CRI/Ra:	>80
Lumen luminaire [lm]	4400
temperature [K]	4000



5YR WARRANTY **CRI 80** **4400 LM** **4000 K** **100000 HRS** 

Product Codes	Description
2763141	AVENIDA LED 40W 4400lm 4000K IP66 017

DISANO FARO 5 AND 2

EXTERNAL LIGHTING

Technical Data

Housing	In extruded aluminium, cylindrical section, Ø 180
Difusser	In vandal resistant and V2 self-extinguishing clear polycarbonate, UV-stabilized



Product Codes	Description
2563361	510631-00 FARO 5 1797 LED 14W CLD CELL GRAPHITE

Product Codes	Description
2563360	510060-00 FARO 2 1531 LED 8W CLD CELL GRAPHITE

AVENIDA BOLLARD

Technical Data

Lifetime	96 000h
Efficacy	93 lm/W
Colour Temperature	3000K, 4000k
Body	high pressure die-cast aluminum



XSP HIGH OUTPUT SERIES

Performance Summary

NanoOptic® Precision Delivery Grid™ optic

Efficacy	Up to 145 lm/W
CRI	Minimum 70 CRI
CCT	3000K; 4000K; 5700K
Initial Colour consistency	Class 1 - 10 years on luminaire / 10 years on Colorfast DeltaGuard® finish

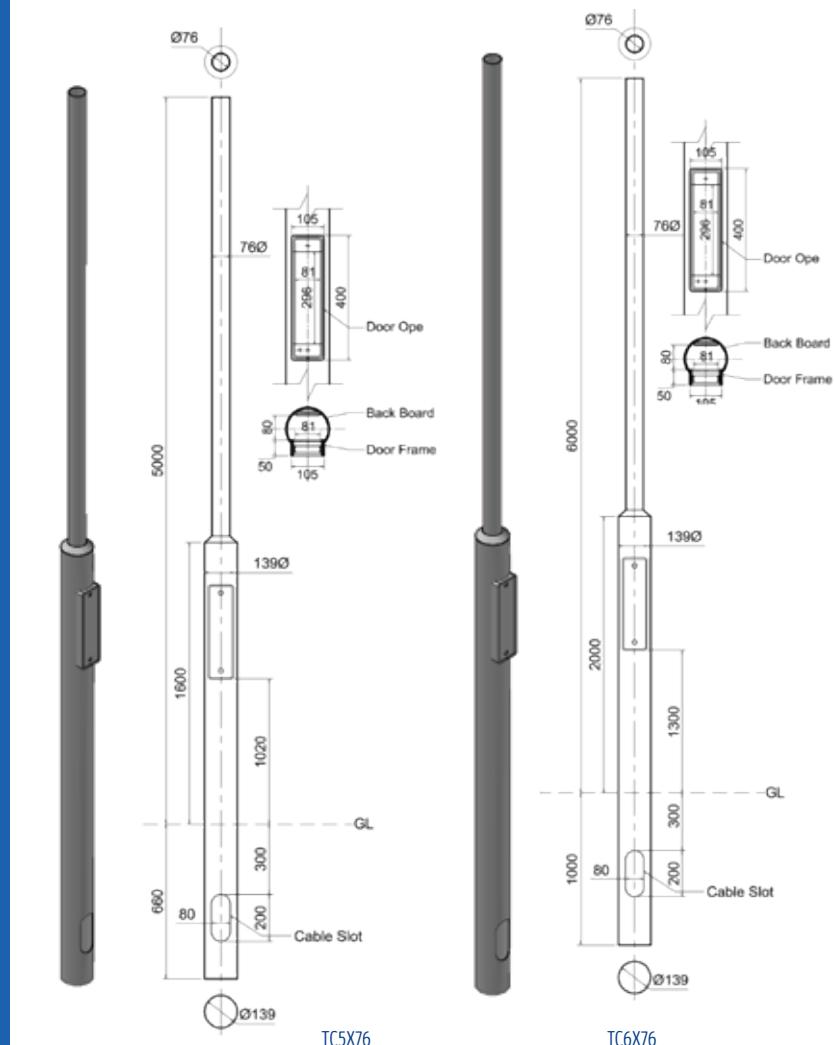


Contact Darren Becton for prices and ordering codes

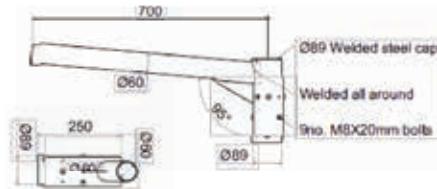
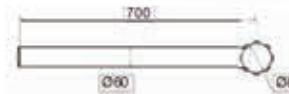


ROUND COLUMN

- Tubular columns provide timeless and elegant solution for your lighting needs and are suitable for post-top mounting or a variety of bracket arms
- Columns are designed to comply with the requirements of the Department of the Environment and local authorities and also with IS EN 40
- Columns constructed from CHS and galvanised internally and externally to BS EN 1461

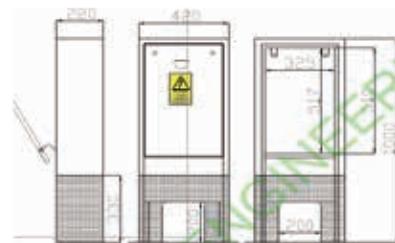


Product Codes	Description
2333484	6MT X 76MM GALV COLUMN
2333483	5MT X 76MM GALV COLUMN



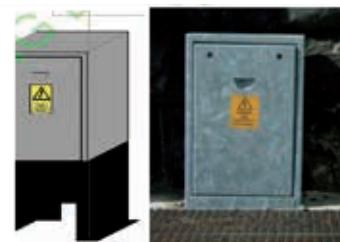
Product Codes	Description
2333495	700MM STRAIGHT OUTREACH

MICRO PILLAR



Product Codes	Description
2333496	ESB MICRO PILLAR

MINI PILLAR

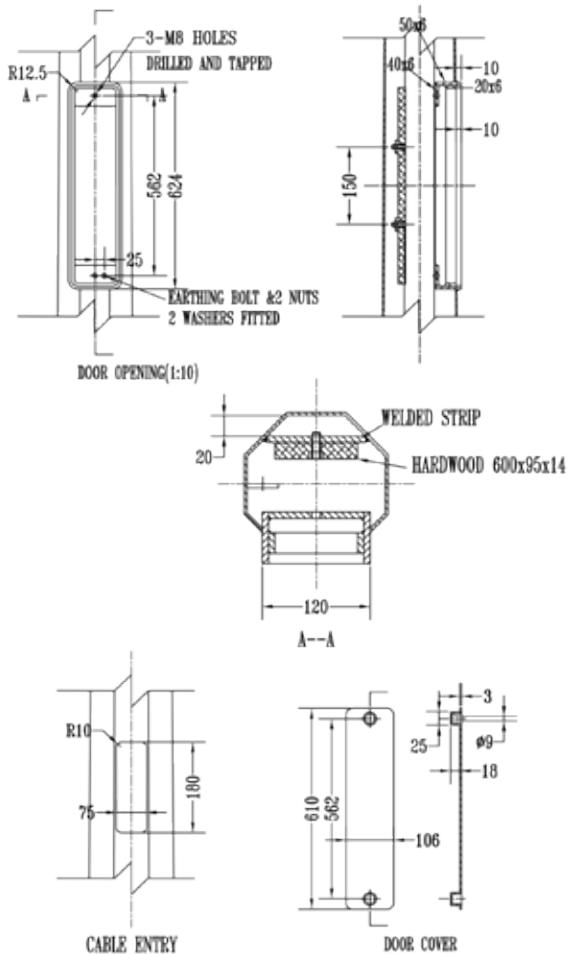


Product Codes	Description
2333497	ESB MINI PILLAR

8MT OCTAGONAL POLE

- Octagonal columns provide extreme versatile combination of mounting heights, base types and outreach options making it the most widely used range of columns.

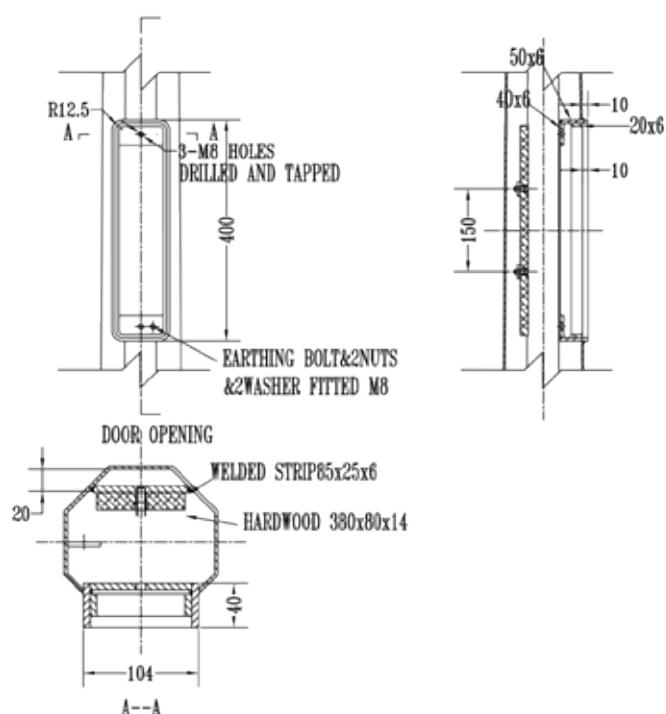
- The octagonal column is suitable for post top mounting or a variety of outreach or extension brackets and t bars are available to suit.



6MT OCTAGONAL POLE

- Octagonal columns provide extreme versatile combination of mounting heights, base types and outreach options making it the most widely used range of columns.

- The octagonal column is suitable for post top mounting or a variety of outreach or extension brackets and t bars are available to suit



Product Codes	Description
2333424	6M STEEL PUBLIC LIGHTING COLUMN "OCTAGONAL"

LUG CRUISER

Technical Data

Mounting	frame (sold separately), suspended, on chains (on request), for hanging on a cable, with special mounting bracket (on request)
Body	high pressure die-cast aluminum
Colour	grey
Replacement of conventional technology [W]:	250W MH (300W)
Diffuser	Tempered glass
Colour Temperature [K]	4000
Additional information	Ball impact resistance
Lifetime	100,000h
Efficacy	167 lm/W
Operating temperature range	-40 °C ... +45 °C



Product Codes	Description
2762001	300092.00051 - CRUISER 2 LB LED ED 184W 26700lm 4000K grey - Standard luminaire for internal mounting
2762002	Cruiser 2 LB LED 20000LM/840 IP65 1000DEG. GREY
2762004	150020.00821 LUG CRUISER ADJ MOUNTING BRACKET
2762005	150020.00824 LUG CRUISER SURFACE MOUNTING BRACKET (2PCS)



NVC AZTEC V2

High-output IP65 LED high-bay fitting.

Technical Data

Philips high -power LEDs mounted on metal core PCB
Three wattages available:
• 100W, 14,940 lm at 106W, 1411.lm/c.W
• 150W, 19,815 lm at 146W, 136 l.lm/c.W
• 220W, 30,720 lm at 222W, 138 l.lm/c.W
CRI > 80
CCT 4000K
Beam Angle 112°
Weight:
• 100W - 3,4kg / 150W - 5,2kg / 220W - 6,7kg



Product Codes	Description
2702010	AZTEC V2 100W LED UFO HIGH BAY IP65 COL840 14,940 lm
2702011	AZTEC V2 150W LED UFO HIGH BAY IP65 COL840 19,815 lm
2702012	AZTEC V2 220W LED UFO HIGH BAY IP65 COL840 30,720 lm



LUG TRITON

Industrial luminaire designed to light up large-area objects. It is dedicated to use in applications requiring single pendant mounting.

Technical Data

Colour Temperature	4000K
Lumen Output range	from 10500lm to 35550lm
Sizes	275mm, 370mm
Efficacy	165 lm/W
Beam Angle	60°, 90°, 120°
Operating temperature	-30...+45
Lifetime	100,000h
DALI Version	On Request



CREE STELLAR SERIES

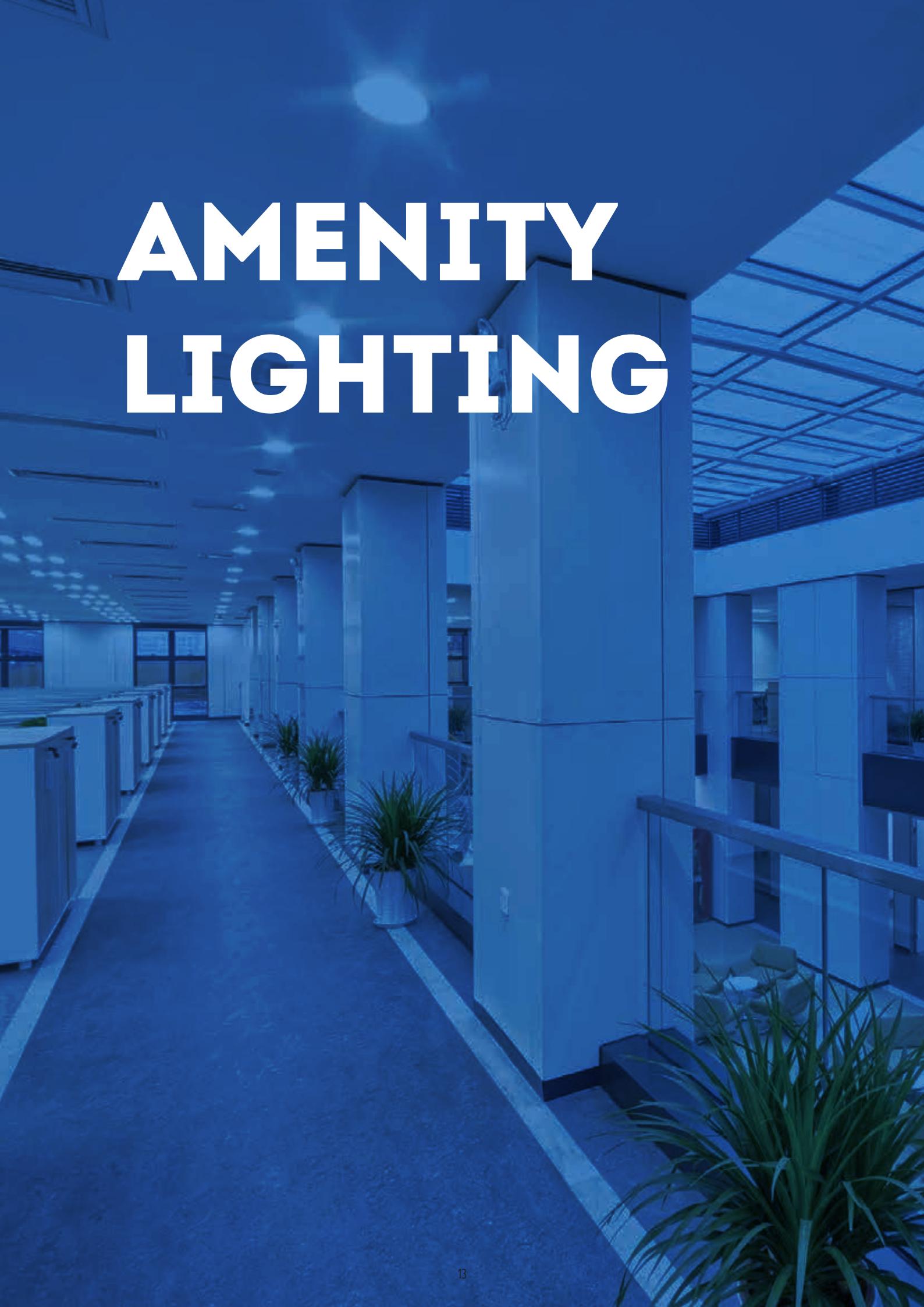
The new Cree lighting high bay Stellar, it is a small and thin luminaire with attractive appearance. With a lightweight body construction, high impact resistance and high - efficient thermal conduction, Stellar has a simple and compact aesthetic that makes it suitable for different applications. With 4 different sizes (small - medium - large and extra-large) it is flexible to every need.

Performance Summary

Integrated Precision Optics available in three distributions (60°; 90°; 120°)



AMENITY LIGHTING

A photograph of a modern office hallway. The ceiling is white with a grid of recessed lighting. The walls are light-colored and feature glass partition walls. Potted plants are placed along the floor. The overall atmosphere is clean and professional.

REXEL 15W CCT3 LED 2D

Specification

LED replacement for 28w 2D
oSensor and Emergency options available
Suitable for switching by PIR, Microwave sensor or photocell



Product Codes

Description

2755105	15W POLO IP65 LED 1200LM WHITE CCT3
2755106	15W POLO IP65 LED 1200LM WHITE SENSOR CCT3
2755107	15W POLO IP65 LED 1200LM WHITE EMERGENCY CCT3
2755108	15W POLO IP65 LED 1200LM WHITE SENSOR & EMERGENCY CCT3



REXEL CCT3 18W CIRCULAR LED BULKHEAD

LED replacement for 100W incandescent wall/ceiling fittings. Complete with switch allowing CCT selection between 3000K, 4000K and 6500K.



Product Codes

Description

2755001	18W CCT3 CIRC LED BULKHEAD WHITE IP54
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DISANO 1844 GLOBO 2.0 14W BULKHEAD

Rated 50,000 hours Lifetime (L80B20)



Product Codes

Description

2565101	GLOBO 2.0 LED 14W WHITE 4K IP65
2565102	GLOBO 2.0 LED 14W SENSOR WHITE 4K IP65
2565103	GLOBO 2.0 LED 14W 3H EMERGENCY WHITE 4K IP65
2565104	GLOBO 2.0 LED 14W 3H EMERG + SENSOR WH 4K IP65



PRELUX VENUS 18W IP65 BULKHEAD

The Prelux Venus 18W standard eyelid bulkhead is a sturdy and reliable LED fitting that provides 800 lumens at 4200K. Prelux Venus fittings are also available in emergency versions with Lithium-Ion battery packs.

Technical Data

Power	18W
Lumens	800lm/1300lm
Colour Rendering Index (CRI)	>80
CCT	4200k



Product Codes	Description
2135020	PXVEN01B VENUS IP65 18W LED BULKHEAD ROUND BLACK
2135021	PXVEN01G VENUS IP65 18W LED BULKHEAD ROUND GREY
2135022	PXVEN02B VENUS IP65 18W LED BULKHEAD EYELID BLACK
2135023	PXVEN02G VENUS IP65 18W LED BULKHEAD EYELID GREY
2135024	PXVEN01BE VENUS IP65 18W LED BULKHEAD ROUND BLACK W/EMG
2135025	PXVEN01GE VENUS IP65 18W LED BULKHEAD ROUND GREY W/EMG
2135026	PXVEN02BE VENUS IP65 18W LED BULKHEAD EYELID BLACK W/EMG
2135027	PXVEN02GE VENUS IP65 18W LED BULKHEAD EYELID GREY W/EMG

BRONX SLIM

Die-cast aluminium and polycarbonate LED fitting for commercial outdoor areas.

The Bronx slim is a robust IK10, IP65 rated LED bulkhead, ideal for external wall or surface mounting.

This luminaire has a diecast aluminium base, side/rear entry points, polycarbonate hinged diffuser, and retained with stainless steel screws.

Ideal for outdoor lighting, leisure facility lighting, school lighting, car park lighting, and as an amenity solution to provide lighting for entrances, walkways and general building perimeters.



Product Codes	Description
2703009	NBX30SL/LED/840 BRONX SLIM 30W LED WALL PACK
2703010	NBX30SL/LED/PEC/840 BRONX SLIM 30W LED W//PHOTO

DISANO 746 / 747 / 748

OBLÓ 2.0

The Obló represents the evolution of a historic Disano product, renewed in design and technology to ensure even lower energy consumptions and higher LED light quality. The range of the Obló fixtures includes lamps in different sizes and different power outputs to allow choosing the best solution for any need.

5YR WARRANTY **15W** **18W** **24W** **4000 K**

Product Codes	Description
2565110	746 OBLÓ LED 15W CLD CELL 4000K
2565111	747 OBLÓ LED 18W CLD CELL 4000K
2565112	748 OBLÓ LED 24W CLD CELL 4000K

746 15w

747 18w

748 24w

ROBUS OHIO

Circular or oval modern design using UV stabilised material.

Utilising state of the art SMD LED technology to provide a great light output in a warm white light colour, they offer an attractive outdoor lighting solution with very low running costs and without the annoying issues of traditional lamp failures.

These fittings are not only suitable for installation in domestic applications but can equally be used to excellent effect in sheltered housing outdoor common areas, hotel and restaurant or pub walkways or garden applications.

No screws can be seen so looks really neat

Choice of trim to match or contrast location colour

5YR WARRANTY **IP 54**

Product Codes	Description
2085009	OHIO 8W IP54 OVAL BULKHEAD, 3000K, C/W WHITE & BLACK TRIM
2085010	OHIO 12W IP54 OVAL BULKHEAD, 3000K, C/W WHITE & BLACK TRIM
2085011	OHIO 8W IP54 CIRCULAR BULKHEAD, 3000K
2085012	OHIO 12W IP54 CIRCULAR BULKHEAD, 3000K



SGD T30W 2200LM LED WALL PACK

30W CCT 2200LM LED WALLPACK
30W CCT 2200LM LED WALLPACK + PHOTOCELL
Wall or Ceiling Mounted



Product Codes	Description
2725003	30W CCT POLYCARBONATE WALLPACK
2725004	30W CCT POLYCARBONATE WALLPACK W/PHOTOCELL



18W 1400LM CIRC LED WH/BL BULKHEAD

Plus Micro Sens option (Detection range: 1mt - 8mt)



Product Codes	Description
2725008	18W SCIR SENSOR-BL/WH-COOL WHITE 1400LM CIRC BULKHEAD
2725009	18W SCIR SENSOR-BL/WH-WARM WHITE 18W 1400LM CIRC BULKHEAD
2725013	18W BL/WH WARM WHITE 1400LM CIRC LED BULKHEAD
2725012	18W BL/WH COOL WHITE 1400LM CIRC LED BULKHEAD



SGD 18W 1400LM OVAL LED WH/BL

Plus Micro Sens option (Detection range: 1mt - 8mt)



Product Codes	Description
2725010	18W SOV SENSOR-BL/WH-COOL WHITE 1400LM SOV BULKHEAD
2725011	18W SOV SENSOR-BL/WH-WARM WHITE 1400LM SOV BULKHEAD
2725014	18W SOVLED BL/WH COOL WHITE 1400LM OVAL LED BULKHEAD
2725015	18W SOVLED BL/WH WARM WHITE 1400LM OVAL LED BULKHEAD



LED PANELS, BATTENS & DOWNLIGHTS

DISANO MINICOMFORT

LED 841

State-of-the-art light source for greater efficiency and Dark Light optics for controlled light emissions (luminance < 500 cd/m² for radial angles > 65°). Absolutely no glare and colours are perceived as if they were viewed under natural light conditions,

Technical Data

Housing	in galvanised steel sheet panels, pre-coated with polyester resin
Cover	with steel panels
Equipment	hinged door and quick clamping Mechanism, with protective film on fixture and baffle louvre
Warranty	Supplied without brackets: for non-surface mounted versions, use bracket acc. 326
On request	integrated multi-sensor, order with subcode -0092 (1-10V)
Colour Rendering Index (CRI)	>89
Lifetime	80,000hrs

5YR
WARRANTY

37W

IP
204900
LMUGR
<19

Product Codes

Description

2561474

37W 841 MINI COMFORT LED 160X30LM CLD CELL PANEL



DISANO 842

80% lumen maintenance for 50000 h (L80B20), perfect colour rendering (CRI80 or CRI>90), no glare (UGR<19) and certified low flickering level. Housing and frame: housing in galvanised steel sheet, and frame in aluminium. Inner slab: in PMMA. Diffuser: extruded in prismatic engineering plastic with high thermal transmittance. UGR glare index: UGR<19 (in any situation). - EN 12464. Power factor 0.95 Luminous flux maintenance 80% 50.000h (L80B20).

Technical Data

Colour Rendering Index (CRI)	>80
CCT	4000K
Lifetime	50,000hrs

5YR
WARRANTY

33W

IP
203600
LMUGR
<19

Product Codes

Description

2561487

842 150205-00-3600lm-4000K-CRI80 600X600 LED PANEL
WHITE

2561488

842 150205-0041 LED PANEL DALI 33W 3600LM 4000K DALI



DISANO ACC 600

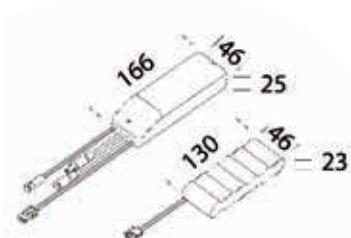
Convert to 3HR Emergency

Product Codes

Description

2561490

986604-31 ACC. 600 3H EMERGENCY KIT



REXEL 40W PANEL

Comparable to T8

Fluorescent (W)	4x18
Total Power (W)	40
Total Light Output (lm)	3,500
Efficacy (lm / cctW)	88
Rated Life (hrs)	50,000
CCT (K)	4,000
CRI (Ra)	80



Product Codes	Description
2751401	Standard, 4000K - 32507 lumen, 600 x 600mm
2751402	Standard, 5000K - 3585 lumen, 600 x 600mm
2751409	Emergency, 4000K, 600 x 600mm
2751403	Standard, 4000K - 3381 lumen, 300 x 1,200mm
2751405	Standard, 4000K - 5336 lumen, 600x1,200mm

600 x 1,200mm

300 x 1,200mm



600 x 600mm

REXEL BACK LIT PANELS

Product Spec	600 x 600 Backlit Panel	600 X 600 UGR Back-lit Panel
Wattage	40w	38w
Warranty	5yrs	5yrs
Rated Life (Hrs)	50,000hrs	50,000hrs
Lumen Output	4100lm	4000lm
Lm/Cw	102lm/cw	105lm/cw
TP Rating	TPb	TPb
Compatible EM Pack	Yes	Yes
IP Rating	20	20
Colour Temp	4000k	4000k
Also available in 5000k	4000k	4000k
Triple E Listing	Yes (LIG TBC)	Yes (LIG TBC)
Flicker Free Driver	Yes	Yes



Product Codes	Description
2751411	LED 600 X 600 BACK-LIT PANEL 40W 4100LM
2751412	LED 600 X 600 BACK-LIT UGR PANEL 38W 4000LM



REXEL EMERGENCY KIT

Convert to 3HR Emergency

Product Codes	Description
2084404	EMERGENCY PACK FOR USE W/LED PANEL



MERCURY MKII LED

The Mercury MKII LED range offers a sleek option, where DHSS recommendations are required to be met. The IP44 rating reduces dust and insects entering the fitting. The end caps are fixed in-place via a stainless steel screw which can be replaced with a tamper proof screw making the fitting anti-tamper.

It is Department of Education compliant

Technical Data

Screwed end caps
Covered gear tray
Rated 125 lumen per watt
UGR19
Listed on the SEAI Triple E website under LIG 87465
CRI80



Product Codes	Description
2631003	SGLLED155350MCMKII V2 DALI 29W 4600LM LED SUR W/5M 5 CORE FLEX
2631004	SGLLED155350MCMKII V2 29W 4600LM LED SUR FTG W/5M 3 CORE FLEX

PRELUX CAMPUS

The 58W 5ft Campus surface luminaire is designed specifically for academic buildings. It provides an efficient 100Lm/W and an excellent quality of luminaire for learning environments.

Technical Data

Colour Rendering Index (CRI)	>80
CCT	4000K
Lifetime	50,000hrs



Product Codes	Description
2751020	5FT 58W 5800LM LED FLAT-BACK FITTING

Technical Data

Suitable for use in flat and apartment blocks, public buildings, care homes, communal areas, reception areas
LED replacement for 1x70W T8 fluorescent surface fittings
Low profile aluminium housing with PBT end caps and polycarbonate diffuser
High impact rating of IK08
Complete with stainless steel mounting brackets
Prewired with 1m of flex
High efficacy of 100lm/W
Wide operating ambient temperature range of -20°C to +40°C
Suitable for switching by PIR, Microwave or Photocell



ROBUS®

Product Codes	Description
2080154	TOUCAN 18W LED BATTEN, 0.6M, IP20, WHITE, 4000K
2080155	TOUCAN 36W LED BATTEN, 1.2M, IP20, WHITE, 4000K
2080156	TOUCAN 45W LED BATTEN, 1.5M, IP20, WHITE, 4000K

ROBUS SCHOLAR LED BATTEN

These superb IP44 fittings replace standard 2 x 36W or 2 x 58W T8 fluorescent battens. Exceptional light output and very low power consumption.



ROBUS®

Product Codes	Description
2081001	RSC604015-01 SCHOLAR 2X30W SURFACE LED FTG 4000K

5W & 7W FIRE RATED CCT3 DOWNLIGHT

Suitable for use in domestic and commercial fire-rated applications such as living, bathroom and bedroom spaces, hotels and office reception areas, shops, pubs and restaurants.

Technical Data

Lumens	72lm/86lm/77lm
CRI	>80
CCT	3K/4K/5K

**3YR
WARRANTY**

7W

5W

**IP
65**



**C.T.
ELECTRIC**

Product Codes

Description

2755314	7W LED FIRE RATED D/LIGHT IP65 70MM DIMM CCT3
2755315	5W LED IP65 FIRE-RATED CCT3 DOWNLIGHT



FOSNOVA ECO LEX, ECO LEX 2 AND ECO LEX 3

Technical Data

Housing	in die cast aluminium
Luminous flux maintenance 80%	50.000h (L80B20).
CCT	4000K
Lumens	1088lm, 1308lm, 2190lm

**5YR
WARRANTY**

11W

14W

21W

**IP
44**



Product Codes

Description

2555387	22172904-00 ECO LEX LED IP44 11W 1088LM 4K 90-96MM CUTOUT
2555388	22172915-00 ECO LEX 2 LED IP44 14W 1308LM 4K 170-190MM CUTOUT
2555389	22172916-00 ECOLEX 3 LED 1729 21W 2190 LM 4k 198-216MM CUTOUT



FOSNOVA LUTHOR

Luthor adjustable recessed LED spotlights offer technologically advanced light and are a very solid product with high quality and high performance to illuminate large commercial spaces.

**5YR
WARRANTY**



Product Codes

Description

2555373	22087815-00 878 LUTHOR LED, 32W WHITE, 3000 LUMEN, RECESSED
2555374	22087817-00 878 LUTHOR 26W LED ADJUSTABLE, 4000K DEGREE
2555379	22088811 LUTHOR LED, 38W, WHITE, 4000K RECESSED ADJUSTABLE DOWN



LUGSTAR LB LED

GEN.2 P/T

Decorative downlight luminaire for suspended ceilings, degree of water and dust-proof IP20 and IP44, for LED light sources, UGR<19

Technical Data

Colour	white
Colour Temperature	3000K, 4000K
IP Rating	IP20 and IP20/4
Equipment	ED, DALI, EM3H
Operating temp. range	0 °C ... +35 °C

Additional Info

Operating temperature range	0 °C ... +25 °C
Lifetime (L70B50)	50 000 h



Product Codes

Description

2765301	300031.00006 LUGSTAR LB LED RECESSED ED 2300LM/840 IP44 70°
2765302	300031.00008 LUGSTAR LB LED RECESSED ED 3000LM/840 IP44 70° DE215mm cutout
2765304	300031.00040 LUGSTAR LB LED RECESSED DALI 3000LM/840 IP44 70°

LUG INTO R100 & R160

Technical Data

Colour Temp.	3000K, 4000Kt
Equipment	ED, DALI, EM3H on Requestt
IP Rating	IP20 and IP20/54
Mounting	In the ceiling, surface mounted, suspended

Beam angles depends on model	15°, 18°, 22°, 28°, 34°, 45°, 63°
Operating temperature range	0 °C ... +40 °C
Efficacy	up to 122 lm/W



R100



R160



AURORA 4.5W DIMMABLE FIRE RATED DOWNLIGHT

The E5™ fixed fire rated downlights set new levels in performance. Featuring the sparkling low glare multifaceted EnFiniti™ lens and delivering up to 390lm from the 4.5W version. Fibre based insulation coverable - up to 300mm.



Product Codes

Description

2685321	EN-DE5/30 ENLITE 4.5W IP65 FIRERATED D/LIGHT DIMMABLE
2685322	EN-BZE5W ENLITE WHITE BEZEL



ROBUS VEGAS

STRIP LIGHTING

This range of LED flexi-strip consists of single colour warm or neutral white, RGB or RGBW strip which can be ordered by the metre.

This is a system, which when used with appropriate drivers and controllers provides a superb lighting effect for domestic, retail, commercial or entertainment venues.

Low power consumption (4.8W/m, 7.2W/m, 9.6W/m, 12W/m, 14.4W/m). Helps to save energy.

Cool running with no ultra violet or infra-red in the light beam. Will not burn, damage or fade leaves, flowers or other sensitive displays.

Range of control components available including Controllers which allow control using the ROBUS CONNECT App. Bespoke designs & controls can be achieved.

Available to order per meter.

VEGAS Cut to Length service available through ROBUS Customised Conversions department.

ROBUS

Product Codes	Description
2080162	VEGAS 4.8W/M 12V 60LED/M 3000K IP67 P/M
2080163	VEGAS 4.8W/M 12V 60LED/M 4000K IP67 P/M
2080164	VEGAS 9.6W/M 24V 120LED/M 3000K IP20 P/M
2080165	VEGAS 9.6W/M 24V 120LED/M 4000K IP20 P/M
2080166	VEGAS 30W 12V IP20 CON VOLT DRVR N/DIM
2080167	VEGAS 60W 24V IP20 CON VOLT DRVR N/DIM
2080168	VEGAS 150W 24V IP20 CON VOLT DRVR N/DIM
2080169	VEGAS 60W 24V IP67 CON VOLT DRVR N/DIM
2080172	EASY CLIP "X" CONNECTOR VEGAS STRIP 4.8W 3PK
2080173	EASY CLIP "T" CONNECTOR VEGAS STRIP 4.8W 3PK
2080174	EASY CLIP "L" CONNECTOR VEGAS STRIP 4.8W 3PK
2080178	VEGAS 100W 24V IP67 CON. VOLT DRVR N/DIM
2080179	VEGAS 9.6W/M 24V 120LED/M 3000K IP67 30M
2080180	VEGAS 9.6W/M 24V 120LED/M 4000K IP67 30M
2080181	VEGAS CONNECT 240W WIFI CONTROLLER IP20 SINGLE
2080182	VEGAS CONNECT 240W WIFI CONTROLLER IP20 RGB
2080183	VEGAS CONNECT 240W WIFI CONTROLLER IP20 RGBW
2080184	VEGAS 30W 24V IP20 CONTROLLER VOLT DRIVER NON-DI
2080185	VEGAS 4.8W/M 12V 60LED/M 3000K IP20 P/M 50M RL
2080186	VEGAS 4.8W/M 12V 60LED/M 4000K IP20 P/M 50M RL
2080187	VEGAS 14.W/M 24W 60LED/M RGB IP20 P/M 50M RL
2080188	VEGAS 15W 12V IP20 CON VOLT DRVR N/DIM
2080189	VEGAS 60W 12V IP20 CON VOLT DRVR N/DIM
2080197	VEGAS GLUE FOR IP67 LED STRIP CONNECTORS
2080198	VEGAS HEAT SHRINK FOR IP67 LED STRIP CONNECTORS



CLOUD CONNECTED SMART LIGHTING RANGE.
THESE EASY TO USE, AFFORDABLE SMART PRODUCTS
ARE PERFECT FOR DOMESTIC TO SMALL
COMMERCIAL SMART LIGHTING APPLICATIONS.



ALEXA & GOOGLE HOME

ROBUS CONNECT is compatible with Amazon Alexa and Google Assistant.
This allows you to:



GROUP OTHER CLOUD-BASED DEVICES

If you own other Alexa or google assistant smart products you can use them alongside your ROBUS CONNECT devices.

VOICE CONTROL

“Hey Google, set my ROBUS downlights to warm white”
or “Alexa, set my ROBUS Flexi-strip to red”.



ULTIMUM CONNECT



GLS CONNECT



GU10 CONNECT



DOORBELL CONNECT



OUTDOOR CAMERA CONNECT

CODE

2089100	RCFC522B15 FILAMENT CONNECT, DIMMABLE, B15
2089101	RCFC522E14 FILAMENT CONNECT, DIMMABLE, E14
2089102	RCFG722B22 FILAMENT CONNECT, DIMMABLE, B22
2089103	RCFG722E27 FILAMENT CONNECT, DIMMABLE, E27
2089104	RCG7RGBCXE27 GLS CONNECT 7W LED LAMP RGB + TUNABLE WHITE E27
2089105	RCG7RGBCXB22 GLS CONNECT 7W LED LAMP RGB + TUNABLE WHITE B22
2089106	RCGU5RGBCX 5W WIFI RGB & TUNABLE WHITE, LED LAMP
2089200	RCPIR-01 PIR CONNECT, WIFI, IP20, WHITE
2089201	RVACCT2-WIFI VEGAS CONNECT 240W, IP20, TUNABLE WHITE
2089300	RCP13UK-01 PLUG CONNECT, WITH POWER METERING, 13A, UK, WHITE
2089301	RCRX200D RX CONNECT 200W WIFI DIMMER
2089500	RCDS-01 DOOR SENSOR CONNECT, WIFI, IP20, WHITE
2089510	RCCI1080-01 CAMERA 4.5W INDOOR 1080P 2-WAY AUDIO IP20 WH
2089512	RCCO1080-01 CAMERA 5.5W OUTDOOR 1080P 2-WAY AUDIO IP65 WH
2089513	RCD1080-04 DOORBELL WITH 1080P CAMERA, IP54, BLK
2089520	RCCHIME-01 CHIME, FOR USE WITH DOORBELL CONNECT, WHITE

CORROSION PROOF



BEGHELLI BS100 LED ADJUSTABLE

High performance fixture with high flux and no glare screen. The fixture is equipped with a 4 position switch driver.

Mounting	Ceiling, suspension, electrified track
Housing	Polycarbonate
Luminous Flux	>60000h (L80B20)
Optic	White reflective powder coated steel



Beghelli

Product Codes	Description
2090369	40005 59W BS100 LED ADJ L1580MM 6500/7000/7500/8000LM - 4000K
2611502	BS100 47W LED ED 4000K C/PROOF 1500MM W/EMER

NVC CLEVELAND

Polycarbonate weather-proof LED fitting.

Technical Data

Colour Rendering Index (CRI)	>80
CCT	4000K
1550mm (5ft)	<ul style="list-style-type: none"> Single 35W, 3,875 lm, 110 lm/c.W Twin 57W, 6,600 lm, 114 lm/c.W

Applications

Industry, garages & workshops
Food preparation areas
Resistant to impact and many chemical agents, but for suitability in specific environments please take specialist advice



Product Codes	Description
2700394	NCV1X5/840 Cleveland LED Single 5Ft IP65 840
2700395	NCV1X5/M3/840 Cleveland LED Single 5Ft IP65 M3 840
2700392	NCV2X5/840 Cleveland LED Twin 5Ft IP65 840
2700391	NCV2X5/M3/840 Cleveland LED Twin 5Ft IP65 M3 840

DISANO ECHO

Shatterproof Polycarbonate water-proof LED light fitting. The lighting fixture complies with the requirements of the IFS and BRC consortiums and the HACCP directive; ideal for installation in the food industry.

Technical Data

Colour Rendering Index (CRI)	>80
CCT	4000K

5YR
WARRANTY

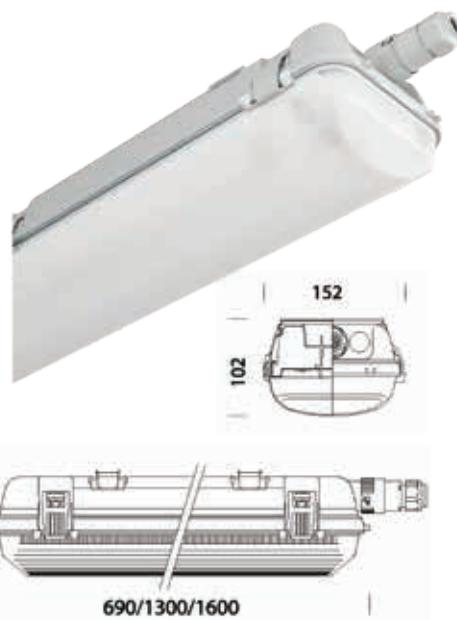
48W

**IP
66**

**7780
LM**



Product Codes	Description
2560347	164705-00 927 ECHO LED WHITE 48W, 2,63 kg, Lamps: 7780lm-4000K-CRI 80, Colour GREY
2560350	164705-31927 ECHO LED EMERGENCY 3H, 3,63 kg. Lamps: 7780lm-4000K-CRI 80, Colour GREY



DISANO 972 HYDRO STYLE

Special version for rooms with a high concentration of chemical products, gas and vapours, such as warehouses, chemical plants, food processing plants or covered external areas (breeding farms).

In these fixtures, the housing and the transparent shield are made in a special material capable of resisting to chemical agents (ammonia, alkaline solutions, soap, alcohol and oil detergents - see table).

Chemical	Weightchange(%)	Appearance
Acetone	4.92	I
Ammonium hydroxide (sp. gr. 0.90)	0.14	A
Ammonium hydroxide (10%)	0.09	A
Detergent sollution (0.025%)	0.08	A
Diesel Fuel	0.04	A
Dimethyl formamide	3.8	I
Distilled water	0.1	A
Ethyl alcohol (50%)	0.08	A
Ethyl alcohol (95%)	0.03	A
Isopropanol	-0.04	A
Lipid solution (2%)	0.01	A
Methyl alcohol	Me 0.18	A
Olive oil	0.06	A
Soap solution (1%)	Soa0	A
Sodium chloride solution (10%)	0.07	A
Sodium hydroxide solution (10%)	0.05	A
Toluene	12.14	I

Code Comment

A → resistant

I ← non resistant

5YR
WARRANTY



Technical Data

Operating temperature range [°C]	-20 ... +35
Efficacy	145 lm/W
Equipment	ED, DALI, EM3H

General Data

Lifetime (L80B10)	60 000 h
Additional information	stainless steel clips included outdoor use only under a cover, do not expose to direct sunlight and rain

Optical Data

Way of lighting	direct
Diffuser	polycarbonate CRI/Ra: ≥80
Lumen LED [lm]	7100
Lumen luminaire [lm]	6050
Temperature [K]	4000



Product Codes	Description
2760340	300090.00062 ATLANTYK LB LED 1640 ED 7100LM/840 PC OPAL IP65

THE WAY
FORWARD IS
SMART
HOME

Smart home technology is increasing in popularity, get clued up and kitted out with our leading Smart Suppliers.



LIGHTING CONTROLS

LIGHTING CONTROLS

All are specifically designed to maximize performance, energy efficiency and safety.

5YR
WARRANTY

300W LED
MAX LOAD

Product Codes	Description
2082501	PIR 180 STAND ALONE
2082502	RECESSED. 360 DEG PIR
2082508	UNIVERSAL RECESSED/SURFACE 360DEG PIR
2082509	MOTION DETECTOR 360 DEGREE PIR SURFACE
2752510	180 DEG PIR IP54 WHITE DIRECTIONAL SENSOR
2752511	180 DEG PIR IP54 BLACK DIRECTIONAL SENSOR
2082512	180 DEGREE IP44 WALL MOUNTED PIR, MANUAL
2082513	RECESSED 360 DEG PIR CEILING PRESENCE SENSOR IP20
2752514	SURFACE/RECESSED 360 DEG PIR CEILING PRESENCE/OCCUPANCY IP20
2752515	SURFACE 360 DEG PIR CEILING PRESENCE SENSOR IP20
2752516	RECESSED/FLUSH 360 DEG PIR CEILING PRESENCE SENSOR IP20
2082517	CORNER MOUNT BRACKET

SENSORS/LIGHTING CONTROLS



BEG SENSORS

Specialists in Occupancy and motion detectors. Ceiling motion detector.

B.E.G.

Product Codes	Description
2062504	92190 PD3-1C-SM SURFACE PIR
2062505	92196 PD3-1C-FC RECESSED PIR



HAGER EE804

Detector 360° wall mounted

Technical Data

Mounting Type | Surface Mounted

2YR
WARRANTY

IP
21

Occupancy
Sensor

Presence/PIR
Detector

:hager

Product Codes

Description

2062569 EE804 HAGER SURFACE ON/OFF ONLY PIR

SENSORS/LIGHTING CONTROLS



HAGER EE805

Detector 360° flush mounted

2YR
WARRANTY

IP
21

Occupancy
Sensor

Presence/PIR
Detector

:hager

Product Codes

Description

2062568 EE805 HAGER FLUSH ON/OFF ONLY PIR



HAGER EE815

Presence detector 360° monobloc, flush mounted

Technical Properties

Supply voltage	230 V +10% / -15%
Maximum Mounting Height	4m
Colour	white
Detection angle	360°
Diameter detection range on floor	7m

2YR
WARRANTY

IP
21

Occupancy
Sensor

PIR/
Presence/
Absence
Detector

:hager

Product Codes

Description

2062560 EE815 HAGER PIR 7MTR NON DIMMABLE



HAGER EE816

Presence detector 360° monobloc DALI/DSI, flush mounted

SENSORS/LIGHTING CONTROLS

Technical Properties

Supply voltage	230 V +10% / -15%
Maximum Mounting Height	4m
Colour	white
Detection angle	360°
Diameter detection range on floor	7m

2YR
WARRANTY

IP
21

Occupancy
Sensor

PIR/
Presence/
Absence Detector
for DALI lighting

:hager

Product Codes

Description

2062561 EE816 HAGER DS1/DALI DIMM. PIR 7MTR



SOUTHGATE EX-OR CONTROLS (PIRS & MARSHALLING BOX)

A range of high performance PIR sensors for dependable control of analogue and digital dimming lighting loads. High definition lenses, performance optics and software are all optimised to provide class leading sensitivity and occupancy detection ensuring that the lights are always on when required.

A high spec EX-OR PIR cable of presence, absence and daylight controls via photocell. Time delay can be altered from 1 minute to 96 hours

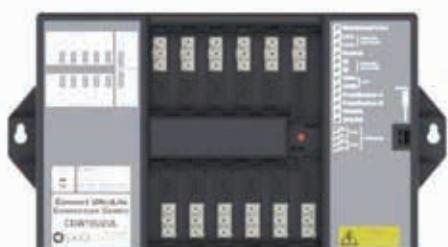
Product Codes	Description
SGL/3100/RF	No Flex & Plug
SGL/3100/RF	5m Flex & 7 Pole Plug for LCM (CDW10U2UL)
SGL/3000/DALI	No Flex & Plug
SGL/3000/DALI	5m Flex & 7 Pole Plug for LCM (CDW10U2UL)



MARSHALLING BOX

Detector 360° flush mounted

Product Codes	Description
CDW10U2UL	<ul style="list-style-type: none">The CDW10U2UL provides an efficient and cost-effective way to interconnect presence detectors and luminaires using industry standard connectors.The CDW10U2UL can connect to ten luminaires and up to two sensorsThe LCM can be split to allow dimmable and fixed into the same LCM
CDW12U5-BDALI	<ul style="list-style-type: none">The CDW12U5 is an intelligent lighting control module (LCM) or connection box providing connections for up to twelve luminaires, up to five sensors and up to five switch inputsThe unit is designed to simplify installation whilst providing an intelligent managed lighting system, including provision for emergency lighting. The PIR's simply plug in with a CAT 5



FLOODLIGHTS

A high-contrast, blue-tinted photograph of a floodlight mounted on a wall. The light is bright and focused, casting a sharp beam of light that illuminates the textured surface of the wall. The rest of the scene is in deep shadow, emphasizing the intensity of the light source.

PHILIPS FLOODS - SIMPLY GREAT LED

The Ledinaire range contains a selection of popular off-the-shelf LED luminaires that comes with the Philips high quality levels. Reliable, energy-efficient and affordable - just what you need.

Features:

- Wide range of applications with lumen outputs from 1,000lm, up to 21,000lm
- Warm white (3000K) and Neutral white (4000K) versions
- Extra flat IP65, IK07 design of floodlights, supplied with cable, can be mounted
- Standing-up or hanging-down
- Long lifetime of 50,000 hours

Technical Data

Lumens	1000lm up to 21000lm
CCT	3K & 4K



Product Codes	Description
2752710	PHILIPS BVP154 10W 840 FLOOD
2752711	PHILIPS BVP154 20W 840 FLOOD
2752712	PHILIPS BVP154 50W 840 FLOOD
2752713	PHILIPS BVP154 10W 840 MICROWAVE SENSOR
2752714	PHILIPS BVP154 20W 840 MICROWAVE SENSOR
2752715	PHILIPS BVP154 50W 840 MICROWAVE SENSOR
2752716	PHILIPS BVP155 100W 840 FLOOD
2752717	PHILIPS BVP155 150W 840 FLOOD
2752718	PHILIPS BVP155 200W 840 FLOOD

50W



20W



150W



CFL SERIES FLOODLIGHT

- The CFL Series Floodlight provides general area lighting and improve the overall look of façades and signage.
- The slim, low profile design adds architectural appeal to any general flood lighting application with crisp uniform white light that offer high performance maximizing energy savings.
- Remarkable light quality and smooth white light, buildings and signage will stand out in the crowd

135 lm/W
Small: Up to 5400 lm
Medium: 10,800 - 20,000 lm
27000 - 32000 lm



DISANO RODIO 1897

Higher wattages are well suited for delivering large volumes of light on sports pitches, training areas.

High quality flood light suitable for medium to large open spaces and small to medium sports surfaces. From 23k to 41k lumen output.



Product Codes	Description
2562637	1897 414823-00 RODIO COB 196W 23245LM 4000K
2562638	1897 414825-00 RODIO COB 246W 31640LM 4000K
2562639	1897 414826-00 RODIO COB 318W 41110LM 4000K



DISANO RODIO 1891

Technical Data

Lumens	13188lm / 16516lm
CRI	>80
CCT	4K



Product Codes	Description
2562688	1891414786-00 121W RODIO LED FLOODLIGHT
2562689	1891414787-00 157W RODIO LED FLOODLIGHT



LED OUTDOOR FLOODLIGHT COMMERCIAL/INDUSTRIAL

The industrial floodlight range is ideal for both industrial and commercial applications offering equivalents up to 250W SON/MH, whilst offering significant energy savings over discharge light fittings with a similar size and shape to traditional commercial floodlights, these are ideal for retrofit applications.

Technical Data

Materials: Aluminium housing and body and Glass diffuser	Photocell option available to turn fitting off when there is enough natural daylight
Mounting bracket for 180° tilt	Suitable for switching by PIR, Microwave or Photocell



Product Codes	Description
2752633	LDV F7040B FLOODLIGHT 70W/4000K BK IP65, Wattage (W) 70, Lumens (lm) 7700, Efficacy (Lm/W) 110
2752636	LDV F7040BP FLOODLIGHT 70W/4000K PHTC BK IP65, Wattage (W) 70, Lumens (lm) 7700, Efficacy (Lm/W) 110
2752632	LDV F9040B FLOODLIGHT 90W/4000K BK IP65, Wattage (W) 90, Lumens (lm) 10000, Efficacy (Lm/W) 110
2752637	LDV F9040BP FLOODLIGHT 90W/4000K PHTC BK IP65, Wattage (W) 90, Lumens (lm) 10000, Efficacy (Lm/W) 110
2752634	LDV F13540B FLOODLIGHT 135W/4000K BK IP65, Wattage (W) 135, Lumens (lm) 15000, Efficacy (Lm/W) 110
2752638	LDV F13540BP FLOOD 135W/4000K PHTC BK IP65, Wattage (W) 135, Lumens (lm) 15000, Efficacy (Lm/W) 110
2752635	LDV F18040B FLOODLIGHT 180W/4000K BK IP65, Wattage (W) 180, Lumens (lm) 20000, Efficacy (Lm/W) 110
2752639	LDV F18040BP FLOOD 180W/4000K PHTC BK IP65, Wattage (W) 180, Lumens (lm) 20000, Efficacy (Lm/W) 110
2752630	LEDVANCE FLOODLIGHT 20W 4000K BLACK IP6
2752631	LEDVANCE FLOODLIGHT 50W 4000K BLACK IP6



ROBUS REMY

This superb range of LED flood lights provide energy saving solutions for a range of applications in domestic or non-domestic installations.

Extensive range of flood lights from 10W to 50W



Product Codes	Description
2082672	RRE1040-04 REMY 10W LED FLOOD STD 4000K
2082673	RRE2040-04 REMY 20W LED FLOOD STD 4000K
2082674	RRE3040-04 REMY 30W LED FLOOD STD 4000K
2082675	RRE5040-04 REMY 50W LED FLOOD STD 4000K
2082676	RRE1040P-04 REMY 10W LED FLOOD PIR 4000K
2082677	RRE2040P-04 REMY 20W LED FLOOD PIR 4000K
2082678	RRE3040P-04 REMY 30W LED FLOOD PIR 4000K
2082680	RRE1040-01 REMY 10W LED FLOOD WH 4000K C/W J/BOX
2082681	RRE2040-01 REMY 20W LED FLOOD WH 4000K C/W J/BOX
2082682	RRE3040-01 REMY 30W LED FLOOD WH 4000K C/W J/BOX
2082683	RRE5040-01 REMY 50W LED FLOOD WH 4000K C/W J/BOX
2082684	RRE1040P-01 REMY 10W LED FLOOD PIR WH 4000K C/W J/BOX
2082685	RRE2040P-01 REMY 20W LED FLOOD PIR WH 4000K C/W J/BOX
2082686	RRE3040P-01 REMY 30W LED FLOOD PIR WH 4000K C/W J/BOX



EMERGENCY LIGHTING

LED is now the preferred light source
for all emergency lighting

LOWER MAINTENANCE COSTS

With old fluorescent and incandescent technologies lamps had to be changed regularly. The long life of LEDs means that this is no longer necessary, so maintenance cost are greatly reduced.



RELIABILITY

Fluorescent lamps were never ideally suited to being run on batteries, so blackened lamp ends were a common problem indicating that a lamp was nearing the end of its life. LEDs are well suited to running on battery power and are therefore much more reliable.



BETTER LIGHT DISTRIBUTION

Fitted with a lens, LEDs can give the precise light distribution needed for corridors.

Better light distribution means improved uniformity, better spacing and fewer fittings required to give an installation that conforms to standards.

NVC NEBRASKA LITHIUM

IP65 LED slim emergency bulkhead with a range of attachments.

Technical Details

175 lm on mains
133 lm on battery supply
1.9W
3 hours operation on battery power after mains failure
Can be installed as maintained or non-maintained



Product Codes	Description
2704216	NEBRASKA 2W LED IP65 MAINTAINED 3HR LITHIUM
SPECIAL ORDER	Nebraska V3 Recessed Mounting Kit

EMERGENCY LIGHTING

LITHIUM

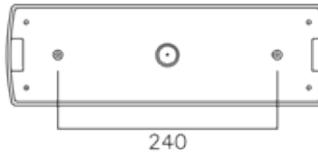
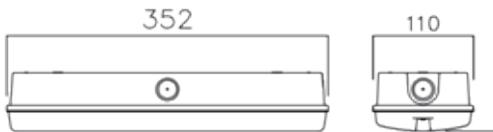
IRON PHOSPHATE

UP TO 50% SAVING ON
RUNNING COSTS v NiCd

DOUBLE THE OPERATIONAL LIFE,
SO HALF THE COST TO MAINTAIN

NO TOXIC SUBSTANCES
USED IN MANUFACTURE

CAN BE RECYCLED



NVC KANSAS IP20

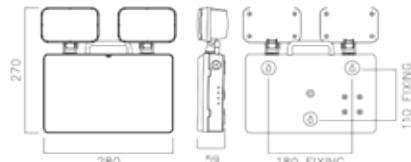
Twinspot LED IP20 fittings

Technical Details

3-hour Non-Maintained
2 x 3W combined body & heads for use from 0°C - +25°C
300 lumens total output



Product Codes	Description
2704004	KANSAS LED TWINSLOT IP20 2X3W 300 LUMEN NON MAINTAINED



NVC KANSAS IP65

Twinspot LED IP65 with Self Test.

EMERGENCY LIGHTING

Application

Suitable for general industrial use, 0°C - +35°C

Construction

Injection moulded ABS body

Polycarbonate heads, including lens

Lithium Iron Phosphate (LiFePO4) 3.2V 5500mAh battery

Suitable for mounting in any orientation

Heads can be rotated & tilted

Piano key terminal block for ease of installation

Technical Details

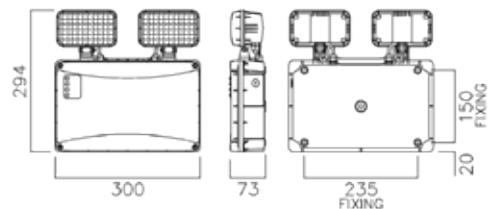
3-hour Non-Maintained

2 x 3W body & heads

380 total lumen output

Self-Testing compliant with BS5266 comprising of a monthly functional test & an annual 3-hour duration test

LED indicators show the status of the Luminaire



CHANGING
TO LITHIUM
IN 2021

Product Codes

2704003

Description

KANSAS 2X3W TWINSпот IP65

NVC SENECA RECESSED

Dedicated LED emergency fittings for recessed mounting.

Application

Corridors

Escape routes

Construction

Moulded polycarbonate body

Acrylic lens

3000mAh battery (not suitable for use below 0°C)

Technical Details

190 lumens

Non-maintained operation

Choice of two lenses for different light distributions:

- Wide, giving a circular distribution
- Oval, giving an oval light distribution. (supplied loose in the box).

Momentary manual test button fitted

Self-test version, compliant with BS5266 available. Suffix STM3 as listed



Product Codes

2704401

Description

SENECA 3W 190 LUMEN RECESSED LED NON MAINTAINED

2704408

SENECA 3W 190 LUMEN SURFACE OPEN PLAN LED NON MAINTAINED



ANSELL BEACON

EMERGENCY LIGHTING

LED Non-Maintained adjustable die-cast aluminium downlight. 3 hour emergency output. Power and green charge LED are discreetly incorporated within the head. 120degrees beam angle.

Technical Data

CCT	6500K
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Product Codes	Description
2734401	ABLED/3NM BEACON 5W RECESSED EMERGENCY LED, WHITE TRIM



ANSELL SWIFT

Twinspot LED IP20 fittings

Technical Details

Small and unobtrusive LED bulkhead
Supplied with self-adhesive legend.
Optic design provides optimum performance for escape route lighting. Side and rear cable entries.
Screwless gear tray for ease of installation.
Supplied with self-adhesive legend.
CCT: 6500K



Product Codes	Description
2735015	ASWTLED/3M SWIFT LED 3M/NM BULKHEAD/LEGEND

ANSELL EAGLE 3-IN-1 LED EXIT SIGN

Modern slim 3-In-1 LED Exit Sign, One fitting that enables choice of three different mounting options suspension recessed or side arm wall mounting, Viewing distance 25 Metres



Product Codes

Description

2734101

AE3LED/3M/W ANSELL EAGLE 3-IN-1 LED EXIT SIGN.

ANSELL GUARDIAN BULKHEAD 3W LED

Ultra-slim profile LED polycarbonate bulkhead, Supplied with self-adhesive legend, Side and rear cable entry, 16mm conduit entry positions, Hinged screw less gear tray for ease of installation, Viewing distance 18 Metres, 50,000 hours average life

Technical Data

CCT

6500K



Product Codes

Description

2735012

AGLED/3M GUARDIAN LED BULKHEAD

2735014

AGLED/KIT RECESSING KIT FOR GUARDIAN

ANSELL WATCHMAN 3W MAINTAINED/ NON-MAINTAINED

Modern slim 3-In-1LED Exit Sign, One fitting that enables choice of three different mounting options suspension recessed or side arm wall mounting, Viewing distance 25 Metres

Technical Data

CCT	6000K
-----	-------



Product Codes	Description
2734100	WATCHMAN LED 3M/NM WHITE EXIT BOX/LEGEND
2734112	WATCHMAN LITHIUM EXIT SIGN 3.5W MAIN/N/MAIN

ANSELL ENCORE LED EXIT SIGN

Ultra slim modern LED 2.6W exit sign with self-test option. White and Silver Grey options.

Technical Data

CCT	6500K
-----	-------



Product Codes	Description
2734103	ENCORE LED 3M/NM SILVER EXIT BOX C/W LEGENDS
2734104	ENCORE LED 3M/NM WHITE EXIT BOX C/W LEGENDS
2734105	ENCORE LED 3M/NM WHITE EXIT BOX, SELF TEST

ANSELL KESTREL LED SUSPENDED 2W EXIT SIGN

Ultra slim suspended LED emergency exit sign with Self-test emergency as standard.

Technical Data

CCT	6500K
-----	-------



Product Codes

2734121

Description

KESTREL LED SUSPENDED EXIT SIGN



ANSELL SIGNAL LED EMERGENCY DOWNLIGHT 1.5W NON-MAINTAINED

Economic and compact LED Non-Maintained fixed downlight

Technical Data

CCT	6500K
-----	-------



Product Codes

2734402

Description

SIGNAL 6500K LED 3NM EMERGENCY DOWNLIGHT



ANSELL FALCON IP65 LED SURFACE EMERGENCY DOWNLIGHT 3W & NON-MAINTAINED

Compact surface ultra-low profile self-test emergency downlight with Self-test as standard

Technical Data

CCT	6000K
-----	-------



Product Codes	Description
2734405	FALCON 6500K LED 3NM SURFACE DOWNLIGHT White
2734406	FALCON 6500K LED 3NM SURFACE DOWNLIGHT Black
2734407	FALCON LED SUR EMR D/LIGHT IP65 Non Maintained 3W White
2734408	FALCON LED SUR EM D/LIGHT IP65 Non Maintained 3W Black



EMERGENCY LIGHTING

LED is now the preferred light source
for all emergency lighting



LOWER MAINTENANCE COSTS

With old fluorescent and incandescent technologies lamps had to be changed regularly. The long life of LEDs means that this is no longer necessary, so maintenance cost are greatly reduced.



RELIABILITY

Fluorescent lamps were never ideally suited to being run on batteries, so blackened lamp ends were a common problem indicating that a lamp was nearing the end of its life. LEDs are well suited to running on battery power and are therefore much more reliable.



BETTER LIGHT DISTRIBUTION

Fitted with a lens, LEDs can give the precise light distribution needed for corridors.

Better light distribution means improved uniformity, better spacing and fewer fittings required to give an installation that conforms to standards.

PRELUX UNIPRO 3

CIRCUIT TRACKS

Comes in easy to cut 2 and 3 metre lengths. Compatible with most common spotlight systems

Technical Data

Frame Material	Extruded Aluminium
Phase & Neutral Conductors	2.5mm ² Rectangular Copper
Available colours	White (RAL9010), Black (RAL9005)
Conductors	Three phase conductors (L1, L2 & L3) neutral (N) & ground (PE).
other	Can be cut to size on site



Product Codes	Description
2135913	P1459302 2M TRACK UNIT BLACK
2135914	P1459303 3M TRACK UNIT BLACK
2135915	P1459199 JOINING UNIT BLACK
2135916	P1459321 CONNECTION UNIT BLACK
2135917	P1459381 END CAP BLACK
2135918	P1459411 WIRE SUSPENSION
2135919	P1459102 2M TRACK UNIT WHITE
2135920	P1459103 3M TRACK UNIT WHITE
2135921	P1459199 JOINING UNIT WHITE
2135922	P1459121 CONNECTION UNIT WHITE
2135923	P1459181 END CAP WHITE

TRACK UNIT



CONNECTION UNIT



JOINING UNIT



END CAP



PRELUX NICO LED

TRACK SPOTLIGHTS

Nico 35W with on-board dimming
Three circuit



Product Codes	Description
2135901	PX12WH3K NICO LED SPOT 12W WHITE 3K
2135902	PX12WH4K NICO LED SPOT 12W WHITE 4K
2135903	PX12BL3K NICO LED SPOT 12W BLACK 3K
2135904	PX12BL4K NICO LED SPOT 12W BLACK 4K
2135905	PX35WH3K NICO LED SPOT 35W WHITE 3K
2135906	PX35WH4K NICO LED SPOT 35W WHITE 4K
2135907	PX35BL2K NICO LED SPOT 35W BLACK 3K
2135908	PX35BL4K NICO LED SPOT 35W BLACK 4K



ANNA LANTERN

OUTDOOR DOMESTIC LIGHTING

Fumagalli Lighting

IP
55



Product Codes

2133554

Description

ANNA LANTERN/BISSO BRKT BLACK



IESSE LANTERN

IP
55



Product Codes

2133569

Description

IESSE BLACK HALF LANTERN



ANNA LANTERN & MIZAR POST

IP
55



Product Codes

2133502

Description

MIZAR POST/ANNA HEAD BACK



MARTA UP & DOWN BULKHEAD LAMP

OUTDOOR DOMESTIC LIGHTING

Fumagalli Lighting

IP
55



Product Codes	Description
2133527	MARTA 90 2L 2X 3.5W LED BLACK
2133528	MARTA 160 2L LED 2X10W LED GREY

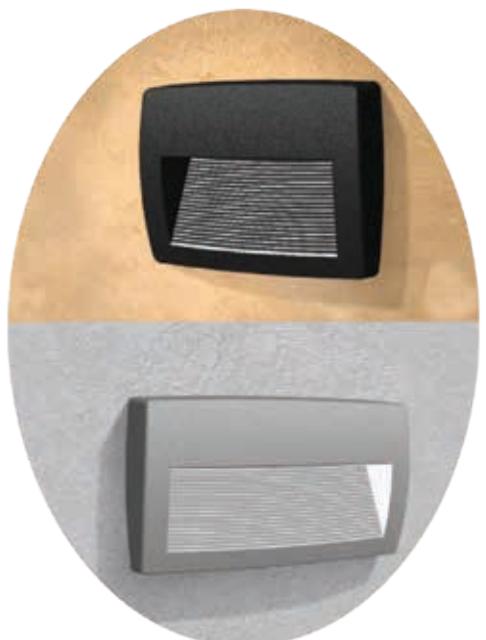


LORENZA

IP
55



Product Codes	Description
2133613	LORENZA 150 4W SURFACE BLACK LED
2133614	LORENZA 150 4W SURFACE GREY LED
2133615	LORENZA 150 4W SURFACE WHITE LED



NINA

IP
55



Product Codes	Description
2133616	NINA 150 4W RECESSED BLACK LED
2133617	NINA 150 4W RECESSED GREY LED
2133618	NINA 150 4W RECESSED WHITE LED
2133619	NINA 190 8.5W RECESSED BLACK LED
2133620	NINA 190 8.5W RECESSED GREY LED
2133621	NINA 190 8.5W RECESSED WHITE LED
2133623	NINA 270 11W RECESSED BLACK LED
2133624	NINA 270 11W RECESSED GREY LED
2133625	NINA 270 11W RECESSED WHITE LED



IP
55



Product Codes	Description
2133519	AMELIA 400MM BOLLARD BLACK 12W
2133520	AMELIA SPIKE 12W BLACK
2133521	AMELIA 800MM BOLLARD 12W BLACK
2133522	AMELIA WALL BRACKET 8W BLACK
2133603	AMELIA 400 BOLLARD 12W GREY
2133604	AMELIA 800 BOLLARD 12W GREY



CARLO

Spike and Wall fitting also available.

IP
55



Product Codes	Description
2133523	CARLO 400MM BOLLARD 3.5W BLACK
2133524	CARLO SPIKE 3.5W BLACK
2133525	CARLO 800MM BOLLARD 3.5W BLACK
2133526	CARLO WALL BRACKET 3.5W BLACK



ABRAM

Spike and Wall fitting also available.

IP
55



Product Codes	Description
2133607	ABRAM 150 4W UP/DOWN BLACK LED
2133608	ABRAM 150 4W UP/DOWN GREY LED
2133609	ABRAM 150 4W UP/DOWN WHITE LED
2133610	ABRAM 190 8.5W UP/DOWN BLACK LED
2133611	ABRAM 190 8.5W UP/DOWN GREY LED
2133612	ABRAM 190 8.5W UP/DOWN WHITE LED



ELISA

Spike and Wall fitting also available.

IP
55



Product Codes	Description
2133518	ELISA 800MM 10W BOLLARD BLACK
2133600	ELISA 500MM BOLLARD 10W BLACK
2133601	ELISA 500MM BOLLARD 10W GREY
2133602	ELISA 800MM BOLLARD 10W GREY

OUTDOOR DOMESTIC LIGHTING

Fumagalli Lighting



For more Fumagalli products, please go to
<https://kelliher.com/fumagalli-lighting>

SENZA LED BOLLARD

Contemporary die-cast aluminium LED bollard.

3YR
WARRANTY

6.5W

IP
54



Product Codes	Description
2733503	ASELEDB/060 6.5W SENZA 4000K LED 600MM BOLLARD
2733504	ASELEDB/100 6.5W SENZA 4000K LED 1000MM BOLLARD

Ansell Outdoor Lighting



ARCO LED BOLLARD

Ultra modern LED bollard.

3YR
WARRANTY

11W

IP
54



Product Codes	Description
2733505	AARLEDB/060 11W ARCO 4000K LED 600MM BOLLARD
2733506	AARLEDB/100 9W ARCO 4000K LED 1000MM BOLLARD



HELDER CIRCULAR BULKHEAD BLACK EYELID

Polycarbonate circular bulkhead for external applications.

2YR
WARRANTY

14W



Product Codes	Description
2736840	AHELED/EB HELDER LED CIRCULAR BULK-BLACK EYELID
2736841	AHELED/EB/PIR HELDER LED CIRCUL BULK-BLACK EYELIDPIR

MATTONE UNI-BRICKLIGHT CCT

Universal polycarbonate LED brick light & unique adjustable feet allows for installation into multiple brick apertures.

2YR
WARRANTY

3W



Product Codes	Description
2736835	AMATBLED MATTONE LED UNI-BRICKLIGHT CCT

REEF SURFACE DOWNLIGHT

Durable indoor/outdoor surface mounted downlight.

3YR
WARRANTY



Product Codes	Description
2736831	AREELEDD REEF LED SURFACE DOWNLIGHT CCT BLACK 5W



BILUME ACTIVATE LED WALL LIGHT

Suitable for use in domestic and commercial outdoor applications as wall mounted decorative lighting.

5YR
WARRANTY

12W

IP
65

ROBUS®

Product Codes	Description
2086895	RABL0153038-25 BILUME 12W DOUBLE LED WALL LIGHTS IP65 3000K



OUTDOOR DOMESTIC LIGHTING

Fumagalli Lighting

VITA CIRCULAR LED KIT

High quality rated LED lighting kit.

2YR
WARRANTY

IP
68

ROBUS®

Product Codes	Description
2086818	R3LED10S-01 WHITE GROUND LIGHTS 10PK



LED GU10 GARDEN SPIKE

High quality ground spike with horizontal and vertical head adjustment.

2YR
WARRANTY

IP
65

ROBUS®

Product Codes	Description
2086899	LS50GU-04 GU10 50W GARDEN SPIKE



EWOK LED MAINS GROUNDLIGHT, IP67

LED replacement for halogen decking lights. Suitable for use in indoor and outdoor applications

OUTDOOR DOMESTIC LIGHTING

Robus Outdoor Lighting



2YR
WARRANTY

IP
67

6000
K

CRI
>75

ROBUS®

Product Codes

2086857

Description

R6LED240S-01 IP67 MAINS GROUNDLIGHT - 6 LEDS WHITE

BLUETOOTH IP65 OUTDOOR LED FLAME SPEAKER

Ideal for streaming music around your home or garden.

- USB charging cable supplied suitable for internal or external use
- Up to 8Hrs of music with flame effect ideal for nightlight

IP
65

LUCECO

Luceco Outdoor Lighting



Product Codes

2126801

Description

BLUETOOTH SPEAKER IP65 LED FLAMELIGHT USB

SOLAR GUARDIAN WALL LIGHT

Ideal for areas without mains power.

- PIR / Photocell with security and presence detection modes of operation
- No wiring needed, FREE light Perfect for residential applications

OUTDOOR DOMESTIC LIGHTING

Luceco Outdoor Lighting



4000
K

6.8W

IP
44

luceco

Product Codes

Description

2126205

800LM 6.8W LED SOLAR WALL LIGHT BLACK

SOLAR GUARDIAN WALL LIGHT

Perfect for external residential applications including patios.

- PIR / Photocell with security and presence detection modes of operation
- No wiring needed, FREE light Perfect for residential applications



4000
K

3.2W

IP
44

luceco

Product Codes

Description

2126204

400LM 3.2W LED SOLAR WALL LIGHT BLACK

LUCECO

Portable rechargeable work light with USB 2 charging, with 1.8A USB output for powering portable devices. 750 Lumen output, 3Hour Battery Duration at full output

IP 54 30000 HRS 5000K

Product Codes	Description
2126206	LSWR7BR-01 USB RECHARGEABLE 10W W/LIGHT 5000K 0.5M

OUTDOOR DOMESTIC LIGHTING

Luceco Outdoor Lighting



LUCECO

RECHARGEABLE CLAMP WORK LIGHT. 4 hour battery duration at full output

2YR WARRANTY IP 54 6000K

Product Codes	Description
2126209	LCWR13G60-01 RECHARGEABLE CLAMP WORKLIGHT 1300LM 15W 6000K



LUCECO

USB rechargeable LED Inspection head torch which is durable and lightweight

6500K IK 07 600 HRS CRI >80

Product Codes	Description
2126213	LILH15P65 USB RECHARGEABLE INSPECTION HEAD TORCH



An aerial photograph of a massive construction project, likely a residential complex, captured at night. The site is a dense network of steel rebar and concrete structures. The entire area is brightly lit from within by the artificial lights of the construction equipment and materials, creating a high-contrast scene where the structures appear almost white against the dark night sky. The perspective is from above, looking down on the sprawling complex.

SITE LIGHTING

LED NON CORROSIVE WORK

An LED non corrosive work light range with a operating temperature of 0°C to +50°C, ideal for use in any indoor/outdoor commercial or industrial construction sites.

Material construction
• Polycarbonate - Yellow base
• Polycarbonate - Opal diffuser
120° Beam angle
Dual brackets included for suspension and wall mounting
3 hour emergency duration option available



Product Codes	Description
2170001	RXL-TRLED8010 2FT WEATHERPROOF 110V YELLOW BODY, 20W 2000lm, 100lm/W, 6300K
2170002	RXL-TRLED8011 2FT WEATHERPROOF 110V YELLOW BODY E3 Y, 20W, 2000lm, 100lm/W 6300K
2170301	RXL-TRLED8020 5FT WEATHERPROOF 110V YELLOW BODY, 40W, 3960lm, 110lm/W, 6300K
2170302	RXL-TRLED8021 5FT WEATHERPROOF 110V YELLOW BODY E3 Y, 40W, 3960lm, 110lm/W, 6300K



LED PLASTERERS LIGHT

An LED Plasterers light perfect for working in both indoor and outdoor confined spaces, with operating temperatures of 0°C to +40°C.

Material construction
• Polycarbonate - Yellow base
• Polycarbonate - Opal diffuser
120° Beam angle
Supplied with foldaway stand for ease of storage and transportation
Supplied with two 16A outlet connections for linkable applications
5m lead and 16A 110V yellow plug



Product Codes	Description
2172402	RXL-P1000 2FT PLASTERERS LIGHT A-FRAME 110V, 20W, 2200lm, 110lm/W, 6300K
2172405	RXL-P1010 2FT PLASTERERS LIGHT TRIPOD 110V, 20W, 2200lm, 110lm/W, 6300K
2172406	RXL-P1020 5FT PLASTERERS LIGHT TRIPOD 110V, 30W, 3300lm, 110lm/W, 6300K



LED TASK LIGHT

A range of task and tripod worklights perfect for indoor and outdoor illumination.

Material construction

- Aluminium body - Yellow
- Tempered glass cover

Complete with 1.5m lead and 16A plug

3YR
WARRANTY

IP
65

IK
08

Product Codes

Description

2172407	RXL-S4010 110v PORTABLE TASK LIGHT, 10W, 900lm, 90lm/W, 4000K
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LED TRIPOD WORKLIGHT

A Range of task and tripod worklights perfect for indoor and outdoor illumination.

Material construction

- Light fitting - Aluminium body - Yellow
- Tempered glass cover
- Tripod - Die cast Aluminium - Yellow

Comes with a telescopic tripod for easy storage and transportation

Complete with 3m lead and 16A plug

3YR
WARRANTY

IP
65

IK
07

Product Codes

Description

2172408	RXL-S4110 110V TRIPOD TASK LIGHT, 10W, 900lm, 90lm/W, 4000K
2172409	RXL-S4120 110V TWIN TRIPOD TASK LIGHT, 10W, 900l, 90lm/W, 4000K



SITE FLOODLIGHT

A range of floodlights suitable for use in industrial and commercial applications such as construction sites.

Material construction

- Aluminium body - Yellow
- Toughened glass cover

500mm lead

3YR
WARRANTY

IP
65

30000
HRS

Product Codes

Description

2172610	N6279 4500LM 50W FLOODLIGHT 110V YELLOW
2172601	N6280 LED 110V 70W REX SLIM FLOODLIGHT
2172602	N6281 LED 110V 100W REX SLIM FLOODLIGHT
2172603	N6282 LED 110V 150W REX SLIM FLOODLIGHT
2172604	N6283 LED 110V 300W REX SLIM FLOODLIGHT



LED FESTOON KITS

A range of festoon lighting kits that are an ideal temporary lighting solution for construction sites due to their light weight and flexibility.

22M Length with 2M Spacings

Option to have festoon only or lamp included kit comes with 10 LED lamps



Product Codes	Description
2176801	RXL-SEFLLEDES, 110V 22M KIT INC ES LAMPS
2176802	RXL-SEFLLEDBC, 110V 22M KIT INC BC LAMPS

INTEGRATED FESTOON KIT

LED Plasterers light perfect for working in both indoor and outdoor confined spaces, with operating temperatures of 0°C to +40°C.

Suitable temporary lighting solution for indoor & outdoor use

Complete 20m kit with 7 fully integrated LED lamps



Product Codes	Description
2176801	SEFLKITINT, 20M INTEGRATED FESTOON KIT 7 X 10W

110V TRANSFORMERS

Robust GRP case with carry handle
Resettable thermal cut out
Resettable thermal cut out

Accessories



1YR
WARRANTY

IP
44

Product Codes	Description
4859808	RXL-1500/2/B 1500VA SITE TRANSFORMER, 1.5KVA, 0.9KVA
4859805	RXL-3300/2/B 3300VA SITE TRANSFORMER, 3.3KVA, 2.2KVA
4859809	RXL-10000/1PH 10000VA SITE TRANSFORMER, 10KVA, 7.0KVA

POWER SPLITTER

A Range of task and tripod worklights perfect for indoor and outdoor illumination.

Power splitter with four 16A 110V outlets
Heavy duty yellow steel case with carry handle
Complete with lead and 16A 110V plug



1YR
WARRANTY

IP
44

Product Codes	Description
3450301	RXL-PS45 POWER SPLITTER WITH CABLE, 2.5M



EXTENSION LEAD REELS

Accessories

2 x 110V 16A dust covered outlet sockets
Easy wind handle
Optimised design for increased cable capacity



Product Codes	Description
3450363	RXL-SE1010 CASSETTE CABLE REEL 16A, 10M, 110v
3450365	RXL-SE1030 OPEN CABLE REEL 16A, 25M, 110v

EXTENSION LEAD

Made with highly durable arctic grade cable
Fitted with 16A 110v plug and coupler
Must be used uncoiled



Product Codes	Description
3450302	RXL-SE3010 YELLOW 1.5MM 16A EXT LEAD, 14m
3450303	RXL-SE3030 YELLOW 2.5MM 16A EXT LEAD, 14m
3450310	RXL-SE3050 YELLOW 1.5MM 16A EXT LEAD, 25m
3450311	RXL-SE3070 YELLOW 2.5MM 16A EXT LEAD, 25m



The future is connected

The future starts now, are you ready for it?

Combine Philips Interact Ready lamps and luminaires with Interact Pro software, to create smart lighting systems for your customers.

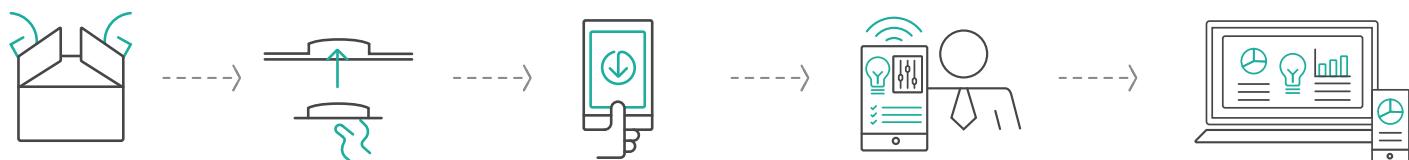
Philips Interact Ready lighting works with the Interact Pro dashboard and app.



Want to become a Philips Connected Lighting expert?

Scan the QR code to sign up for free training:

Get connected in 5 simple steps



1. Unbox

2. Install

Interact Pro gateway and Interact Ready lighting

3. Download

Interact Pro app

4. Configure

system with Interact Pro app

5. Manage

monitor and modify via Interact Pro dashboard

The Interact Pro dashboard and app work with a range of Philips luminaires and lamps and a set of wireless switches and sensors that are Interact Ready.

You can customise the software's settings for specific workspaces. Whether you're connecting 20 light points or 200, Interact Pro helps everyone to work smarter.

Overview of most popular Interact Ready lamps and luminaires

Philips Interact Ready lighting

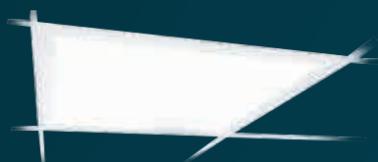
interact
ready.



CoreLine
Waterproof Interact Ready



MasterConnect LEDtube T8
Ultra Output



CoreLine Panel
Interact Ready



CoreLine Downlight
Interact Ready

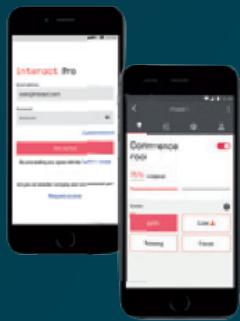
works
with

Interact Pro software

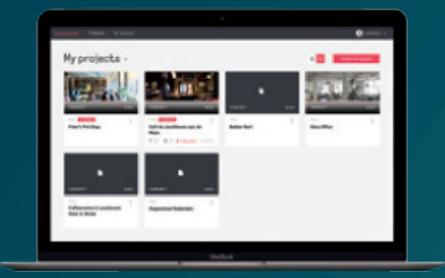
interact Pro



Interact Pro gateway



Interact Pro app



Interact Pro dashboard



NEW SIMPLE SMART CONTROL AT YOUR FINGERTIPS



connect.
control™

Controlled via
Bluetooth®



WORKS STRAIGHT OUT OF THE BOX
EASY TO INSTALL • NO SETUP • NO HUB REQUIRED

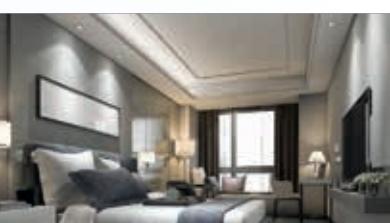
APP AVAILABLE FOR ADVANCED CONTROL
EDIT SCENES • SYNC MUSIC • SET SCHEDULES



SMARTEN LIVING SPACES



SET THE PERFECT MOOD



VERSATILE INDOOR CONTROL



VIBRANT OUTDOOR LIVING

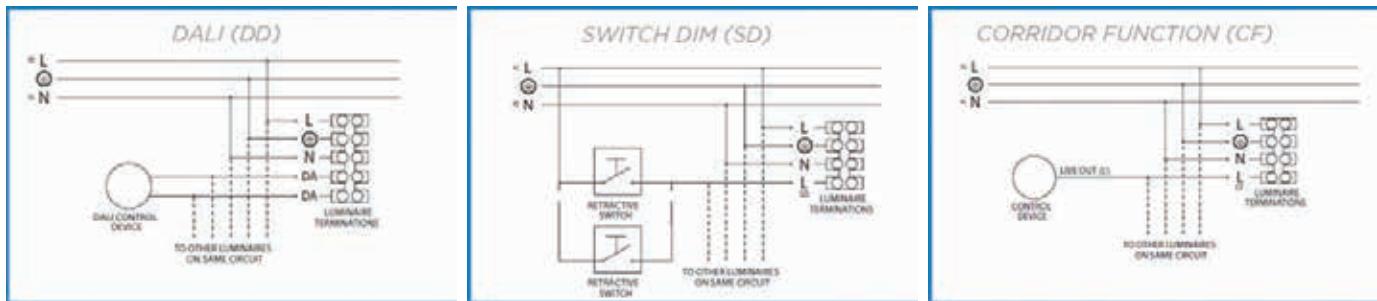
B L U E T O O T H L I G H T I N G S O L U T I O N S

auroralighting.com/connect.control

LIGHTING TERMINOLOGY

DIMMING CONTROL SIGNALS:

There are three types of dimming control signal that we offer as standard options and it may be helpful to think of them as languages - a means by which the driver is told what to do. The three types of dimming control signal we offer are as follows:



DALI (DD)

Typically, a DALI control signal will be generated by a sensor or a lighting control system. Manually operated rotary knobs that generate a DALI control signal are available (at some cost), but if pure manual control is required we would usually recommend switch dim as the simpler and more economical solution.

SWITCH DIM (SD)

Switch dim is a means of controlling a luminaire via a retractive switch. It is a low-cost, intuitive and easy-to-install approach to providing manual dimming control.

CORRIDOR FUNCTION (CF)

Corridor function can be operated by an occupancy sensor, time switch or manual switch. When the switch contact is "made" the light output will be 100%; when the contact is broken the light output will be 10%, or some other value that may be programmed in the driver or control gear.

WHAT ARE TPA AND TPB FOR LIGHTING.

TP(a) and TP(b) are terms that classify lighting diffusers according to their flammability. Polycarbonate diffusers over 3mm thick are automatically classified as TP(a), along with any other material that self-extinguishes within 5 seconds when a flame has been removed. TP(b) diffusers may burn, but not at a speed of more than 50mm per minute.

The terms TP(a) and TP(b) are used in the UK Building Regulations, Fire Safety, Approved Document B, Volume 2 - Buildings other than dwellings.

TP means "thermoplastic" and TP materials, such as polycarbonate (PC), acrylic (PMMA) and polystyrene (PS), are commonly used as diffusers in light fittings. In the context of lighting diffusers in the UK Building Regulations these are classified as TP(a) or TP(b).

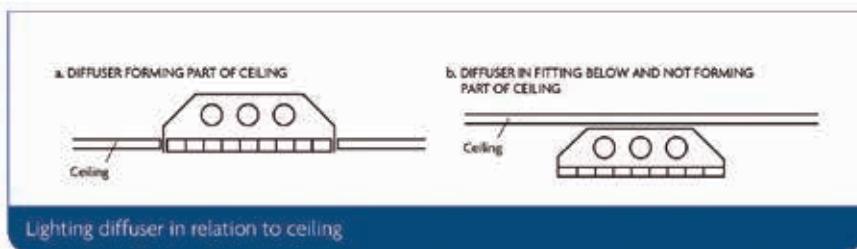
Provided that the material is rated TP(a) or TP(b) it may be used as part of a ceiling, subject to the restrictions below. Material that is rated neither TP(a) nor TP(b) may not be used as a lighting diffuser that is part of a ceiling.

Here is a quick summary of TP(a) and TP(b) and how these terms relate to lighting in buildings other than dwellings.

LIGHTING TERMINOLOGY

WHEN IS A LIGHTING DIFFUSER PART OF A CEILING?

A lighting diffuser is only judged to be part of the ceiling if it is recessed into it. The diagram here is taken from the UK building regulations and makes it very clear - if a light fitting is surface mounted or suspended then it is not part of the ceiling, so the consideration of TP(a) or TP(b) simply does not apply.



In surface mounted and suspended light fittings, which are by definition not part of the ceiling, the type of material that may be used for the diffuser is regulated by the appropriate product standard, in this case BS EN60598. Note that this is a product standard, not a building standard, and 60598 makes no mention of TP(a) or TP(b) at all.

WHAT'S THE DIFFERENCE BETWEEN TPA AND TPB RATED MATERIALS?

The difference between TP(a) and TP(b) rated materials is in their composition and thickness or how they react under test conditions when a flame is applied to them.

To be classed as TP(a) a lighting diffuser material must be either:

- Polycarbonate at least 3mm thick, or
- Polycarbonate with a class 1 rating when tested to BS 476-7, or
- Any other material that when tested to BS 2782-0 Method 508A performs so that the test flame extinguishes before a certain point on the test sample and any flame or afterglow self-extinguishes within 5 seconds of the source of ignition being removed.

To be classed as TP(b) a lighting diffuser material must be either:

- Polycarbonate up to 3mm thick, or
- Any other material from 1.5mm - 3.0mm thick that, when tested to BS 2782-0 Method 508A has a maximum rate of burning of 50mm/minute.

CAN LIGHT FITTINGS WITH TPA RATED DIFFUSERS BE USED ANYWHERE?

Diffusers made of TP(a) rated material can be used to an unlimited extent in the ceilings of rooms and circulation areas, but not in "protected stairways".

A Protected Stairway is, in the words of Approved Document B, "A stair that leads to a final exit to a place of safety and that is adequately enclosed with fire resisting construction. Included in the definition is any exit passageway between the foot of the stair and the final exit."

In a protected stairway no thermoplastic materials at all can be used as part of the ceiling.

LIGHTING TERMINOLOGY

WHAT RESTRICTIONS APPLY TO THE USE OF TPB RATED DIFFUSERS?

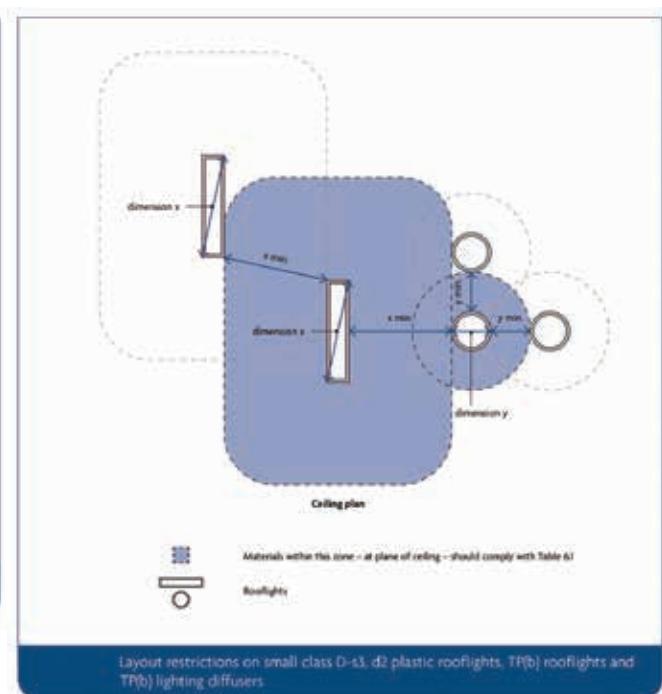
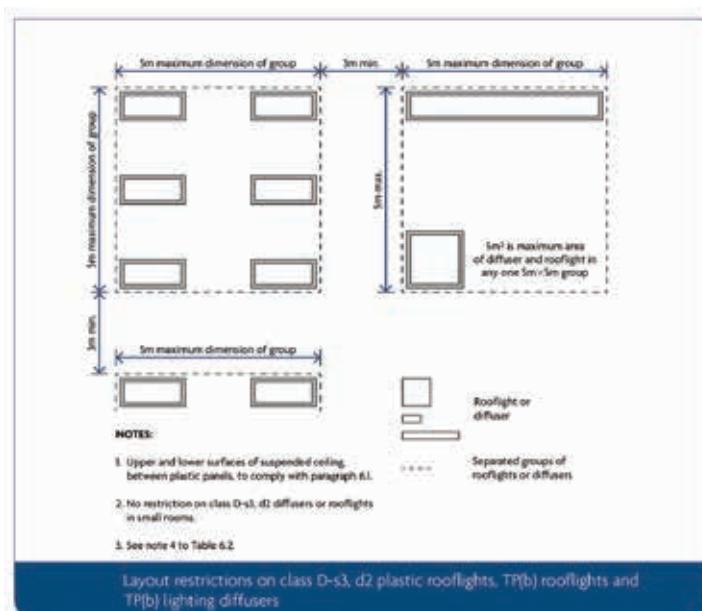
Limited restrictions apply to the use of TP(b) rated diffusers in both rooms and circulation areas, and, as with TP(a) rated diffusers, TP(b) rated diffusers cannot be used at all as part of the ceiling in a protected stairway.

IN ROOMS

- The maximum area of any one TP(b) diffuser must be not more than 1m². So, 600x600 and 600x1200 fittings with TP(b) rated diffusers are permitted.
- The maximum total area must be not more than 50% of the room in question. This means that any commonly used lighting layout would be permissible with TP(b) rated diffusers.
- The distances between fittings must comply with the distances in diagrams 6.2 or 6.3. Again, any commonly used lighting layout would permit the use of TP(b) rated diffusers.
- A minimum space of 3m must be kept between any two 5m x 5m groups of light fittings with TP(b) rated diffusers. If this presents a problem in, for example, an open-plan office lit mostly with 600 x 600 panels the solution could be to selectively introduce a TP(a) rated panel or use a different fitting altogether in the 3m space, such as a downlight.

IN CIRCULATION AREAS

- The maximum area of any one TP(b) diffuser must be not more than 5m². This is enormous, so any commonly used size of fitting would be permitted.
- The maximum total area of TP(b) rated material must be not more than 15% of the circulation area in question. This means that most commonly used lighting layouts would be permissible with TP(b) rated diffusers.
- The distances between fittings with TP(b) rated diffusers must be at least 3m.



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WHAT ARE THE PROS AND CONS OF TPA AND TPB RATED DIFFUSERS?

To achieve a TP(a) rating a diffuser will usually be made of polycarbonate and will be relatively thick, often 3mm or more. This has negative consequences for the efficiency (lumens per watt) of the light fitting for two reasons.

First, polycarbonate has a lower light transmission rate than some other materials, including acrylic (PMMA) and polystyrene (PS).

Secondly, the amount of light lost as it transits through a material is directly proportional to the thickness of the material, so, if other factors are all equal, thinner diffuser materials result in greater efficiency.

TPA V TPB – A SUMMARY

On the great majority of lighting projects recessed fittings with TP(b) rated diffusers are a legitimate and responsible choice.

Fittings with TP(a) rated diffusers can be used in a few additional circumstances, but in the great majority of situations their use is not required and the additional expenditure and potential loss of efficiency has no cost justification.

Some lighting manufacturers, including NVC, offer a range of LED panels with a choice of TP(a) and TP(b) ratings. By using such manufacturers and following their advice in product selection contractors can be confident they are using the most cost-effective solution while maintaining strict compliance with the UK building regulations.

WHAT IS THE DIFFERENCE BETWEEN TPA/TPB AND FIRE RATED?

TP(a)/TP(b) relates to the rating of the material from which a lighting diffuser, when it is part of the ceiling, must be made. It is important in “buildings other than dwellings” and its purpose is to restrict the spread of fire horizontally across a ceiling.

“Fire Rated” is completely different. This refers to light fittings that are recessed into a ceiling that is itself a barrier to the spread of fire vertically from one floor in a building to the one above and which may also endanger fire and rescue personnel if it collapses quickly in the event of a fire.

A fire-rated downlight could, in theory, include TP(b) rated materials, and an LED panel with a TP(a) rated diffuser will almost certainly not be “Fire Rated”.

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EXPLANATION OF SYMBOLS

	CE marked		TP(a) rated diffuser material
	Class I rated		TP(b) rated diffuser material
	Class II rated		WEEE (Waste of Electrical and Electronic Equipment recycling)
	Compliant for use on Enhanced Capital Allowance (ECA) scheme		CRI(Colour Rendering Index) >70
	High quality ENEC approved LED driver		CRI(Colour Rendering Index) >80
	Protected against 5 joules impact. Equivalent to impact of 1.7kg mass dropped from 300mm above impacted surface.		CRI(Colour Rendering Index) >90
	Protected against 10 joules impact. Equivalent to impact of 5kg mass dropped from 200mm above impacted surface.		CCT (Correlated Colour Temperature) = 3000K
	Protected against 20 joules impact. Equivalent to impact of 5kg mass dropped from 400mm above impacted surface.		CCT (Correlated Colour Temperature) = 4000K
	Protection against solids larger than 12.5mm. No protection against liquids.		CCT (Correlated Colour Temperature) = 5000K
	Protection against solids larger than 1mm. No protection against liquids.		CCT = 3000K or 4000K, selected on product
	Protection against solids larger than 1mm. Protection against splashed liquids.		CCT = 4000K or 5000K, selected on product
	Limited protection against dust ingress (no harmful deposit). Protection against splashed liquids.		
	Limited protection against dust ingress (no harmful deposit). Protected against low pressure water jets from any direction (Limited ingress permitted).		
	Totally protected against dust ingress. Protected against low pressure water jets from any direction (Limited ingress permitted).		
	Totally protected against dust ingress. Protected against high pressure water jets from any direction (Limited ingress permitted).		
	Totally protected against dust ingress. Protected against short periods of immersion in water.		
	Totally protected against dust ingress. Protected against long, durable periods of immersion in water.		

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THE BENEFITS OF LED LIGHTING



Improved quality, efficiency and performance



Instant on flicker free light.



Energy saving of up to 93%.



Easy installation and retrofitting - 1:1 replacement for traditional products.



Environmentally friendly - LEDs do not contain any harmful materials, making them easier to dispose of and give out no UV or IR emissions.



A quick initial payback on investment.



Ongoing long-term energy and cost savings for your business.



LEDs last significantly longer than traditional lamps, so maintenance costs are significantly reduced.

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