



EMERGENCY LIGHTING SYSTEM

Product Catalogue

Australia's First Low Voltage, Intelligent,
LED Emergency Lighting System



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Learn more about the full FIREscape range at
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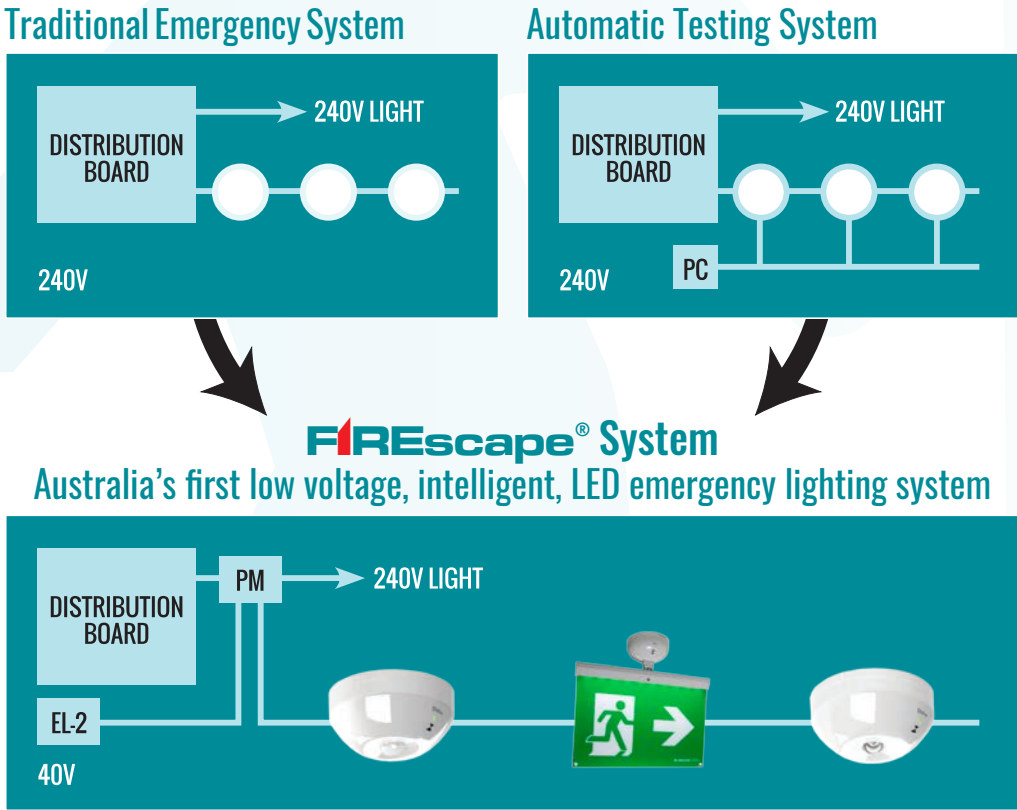
FIREscape®
COST EFFECTIVE AND ENVIRONMENTALLY FRIENDLY
EMERGENCY LIGHTING – AS2293 APPROVAL

Hochiki, world leaders in fire detection manufacturing introduces a brand new concept to the Australian market - an innovative new Emergency Lighting system, **FIREscape®**.

FIREscape® is a unique, highly cost effective and environmentally friendly emergency lighting system based on LED technology and is Australia's first to be fully intelligent.

FIREscape® is based around an addressable, emergency lighting control panel with battery back-up and features addressable, self contained luminaires and signage connected via screened, extra-low voltage (40V) cabling.

With lighting units fitting directly onto the Hochiki sensor base (EL-TSB), **FIREscape®** offers the installer a brand new and easy solution to the installation of emergency lighting and signage.



- ✓ Reduced running costs
- ✓ Self-testing
- ✓ Helps to lower carbon emissions
- ✓ Extra low voltage – saves on cabling costs

A GREENER SOLUTION TO EMERGENCY LIGHTING

The **FIREscape**® system is based on LED (Light Emitting Diode) solutions that consider the useful life of the entire emergency light system, from its installation to the recycling of the equipment at the end of the life-cycle.

The **FIREscape**® emergency light system uses fully recyclable materials that do not place an unnecessary burden on the environment. Due to their unique extra low-voltage solution, cabling costs are reduced by 60% during installation when compared to old central battery-based systems.

Due to their self-contained backup power source, the **FIREscape**® lighting devices can use screened, non-fire rated cabling, instead of heavy and costly fire resistant cabling, reducing the installation costs associated with traditional emergency lighting systems.

The environmentally friendly values in the **FIREscape**® emergency lighting system are specifically evident in the energy costs and CO₂e emissions, which are associated with using and maintaining the system.

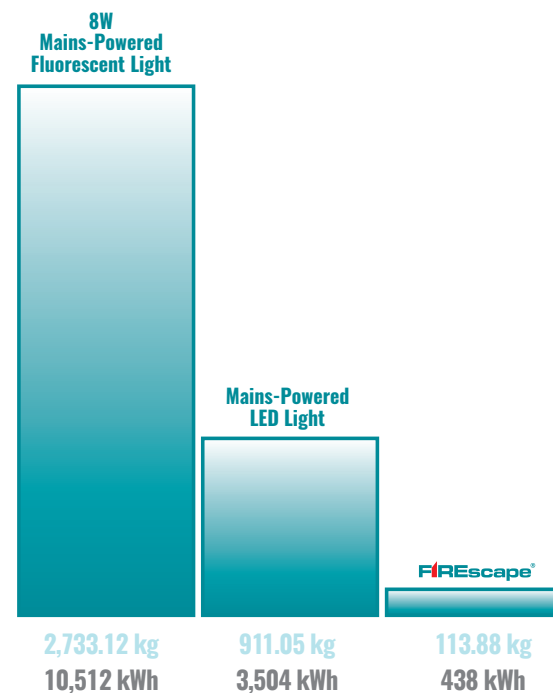
The graph (right) compares the energy consumption and CO₂e emissions of emergency light systems using traditional mains-powered fluorescent technology, a mains-powered LED equivalent and the extra low-voltage **FIREscape**® system, on an annual basis in a 100-luminaires installation.

The **FIREscape**® emergency light system has also been designed, bearing operational safety and user-friendliness in mind. An internal control system has been included within the system. It constantly controls the condition of the lights' LEDs and batteries. If necessary, the system will provide specific information on the status, either locally on a keypad or by representing it graphically at the control centre of the service provider using an IP or GSM network.

By using the optional PC-based graphical software, the luminaire status information can be linked with floor plans showing the alarm locations.

A 100 LUMINAIRES SYSTEM

Annual CO₂e emissions (KG)*
Energy consumption (kWh)



*236g/kWh

VTT Technical Research
Centre of Finland 1999

THE BENEFITS OF **FIREscape**®

- ▶ Environmentally friendly in energy costs and CO₂e emissions
- ▶ A cost-efficient system to implement and maintain
- ▶ Exit luminaires and emergency exit signs share the same circuit
- ▶ Easy installation
- ▶ Reduced cabling costs
- ▶ Luminaire line length 500/1,000M
- ▶ Two lighting lines, up to 127 devices per line
- ▶ Operational reliability; luminaires feature integral stand-by batteries
- ▶ Easy to service and maintain
- ▶ Automatic luminaire battery and LED health testing features

OPERATIONAL RELIABILITY

Totally unique within the emergency lighting industry, the **FIREscape**® luminaires are connected using just a standard screened cable, which reduces installation costs traditionally associated with emergency lighting systems.

A fire-rated cable is not required because all **FIREscape**® luminaires are equipped with integral stand-by batteries allowing the luminaires to function in fail-safe mode even in situations where the control panel becomes damaged or inoperable or the line cable is severed. The luminaire batteries allow continual operation in excess of 3 hrs.

In this way the **FIREscape**® emergency light system fulfils the Emergency Lighting standard, AS2293.

A PIONEER IN EXIT LIGHTING

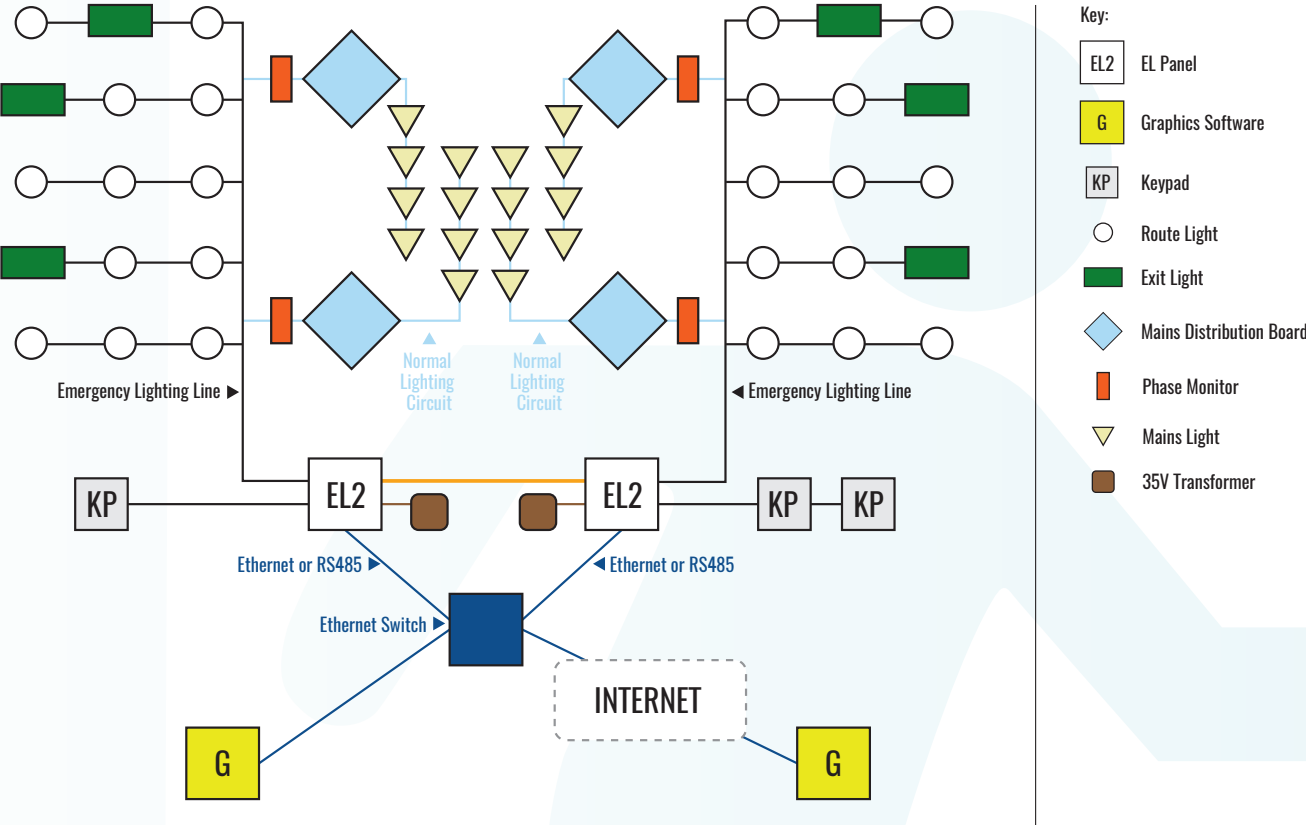
FIREscape® is an intelligent emergency lighting system. The emergency light cabling is installed using the 'branch structure' method, which means that several 'branches' can be teed off from the main cable for different floors and areas of a building.

Due to its programmability, exit and route lights can be freely installed anywhere on the line without having to group them into either exit or route lights. The EL-2 control panel constantly monitors the condition of the luminaire batteries and LEDs and can be programmed to perform the periodical testing and reporting required by legislation.

SYSTEM TOPOGRAPHY

The diagram below shows a typical multi-panel FIREscape® installation. The two EL-2 control panels are networked and these may be controlled by EL-KP keypads.

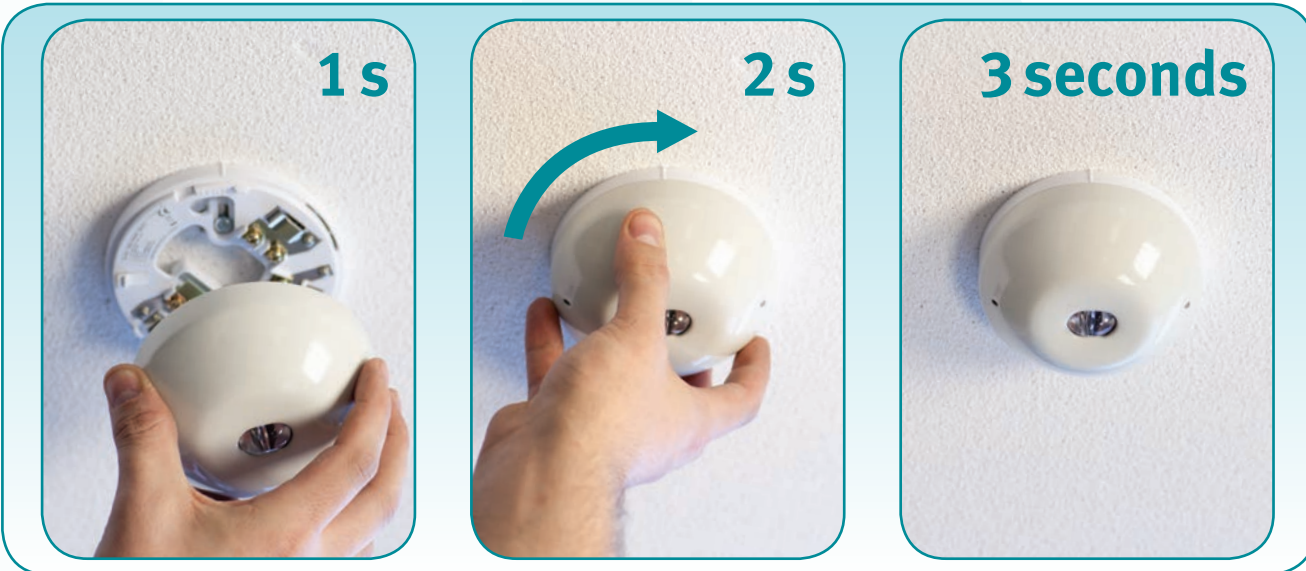
The diagram illustrates how the system does not contain any mains wiring beyond (a) the EL-2 power supply and (b) the connection to the normal lighting circuit distribution board via the EL-PM (Sub-circuit) Phase Monitor.



QUICK AND EASY INSTALLATION

Installer-friendly emergency lights are literally fitted at the turn of a hand. The cabling and bases for the luminaires can be installed in advance.

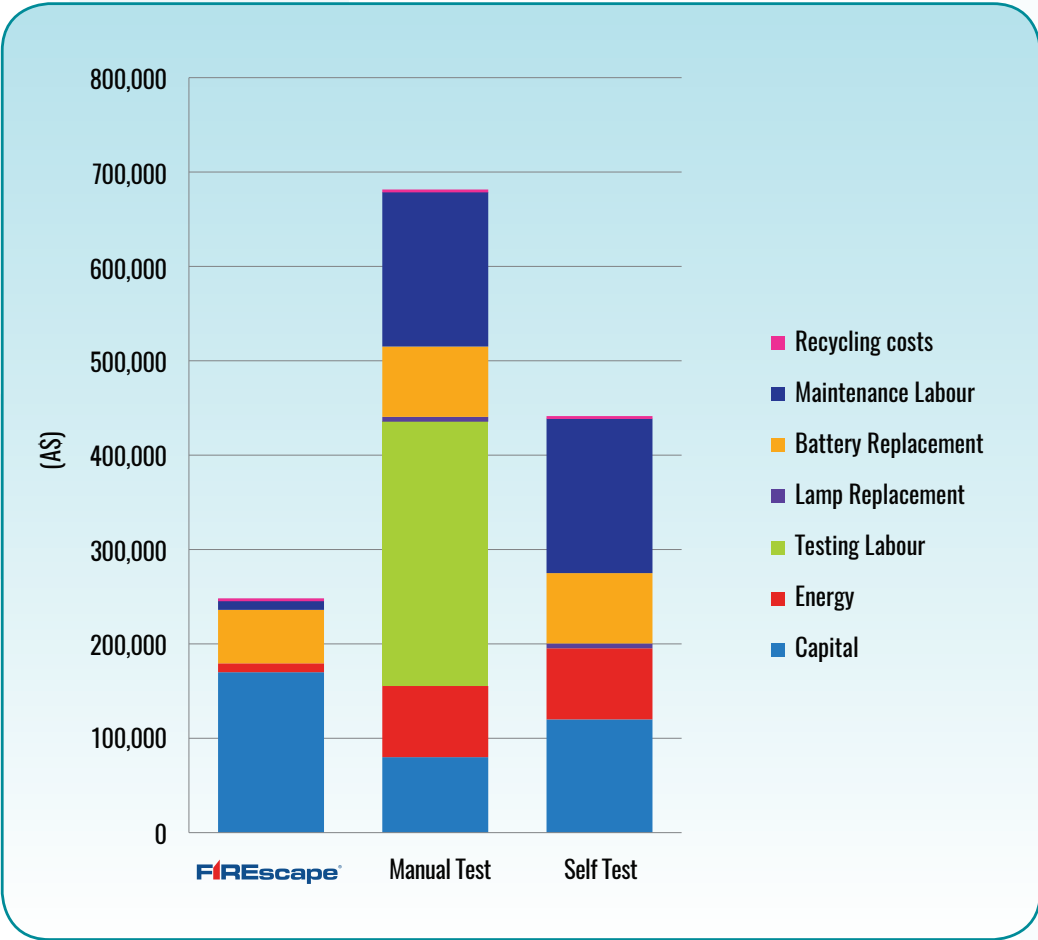
The luminaires themselves can then be attached to the bases during the final phases of building construction. In this way, the units are protected from construction-related dust, dirt, or damage.



ENERGY CONSUMPTION AND CO₂e EMISSIONS

A FIREscape® exit sign luminaire consumes less than 0.5W, including the power loss. A similar 8W fluorescent light exit sign luminaire will consume approximately 12W. When compared to 230V LED lights, FIREscape® products save more than 50% of energy. The lower energy consumption directly correlates with lower CO₂e emissions. For example, replacing 100 230V fluorescent exit luminaires with FIREscape® LED-based exit lights, CO₂e emissions would be reduced by 2,620 KG annually.

The graph below shows a total cost of ownership comparison based on a 1000 luminaires, 80% non-maintained 20% maintained, emergency lighting system for manual-test, self-test and Hochiki's FIREscape® system, over a 10 year period.



AUTOMATIC MONITORING

FIREscape® luminaires use LEDs in order to generate the necessary illumination whilst using as low a current as possible. Even at its highest, the LED current usage is only 80% of the

recommended currents of LED manufacturers. In this way, the light power consumption has been kept to a minimum and the overall life of the LED has been extended.

SYSTEM STRUCTURE

FIREscape® brings new technology with new opportunities and solutions for emergency lighting.

The core of the **FIREscape®** emergency lighting system is the addressable EL-2 emergency light control panel. Altogether 127 exit signs, route lights or Input/Output units can be connected to each of the two addressable lines totalling 254 devices per panel. Both exit signs and route lights utilise LED (Light Emitting Diode) technology, which guarantees around 10 years lifetime (for maintained devices). The unique 'Flex-it' hinge system in the exit signs allows both wall and ceiling mounting utilising the Hochiki mounting base, EL-TSB.

The system is controlled by the discreet EL-KP keypad which features an LCD graphic display. The keypad display can show the address of a device activated or in fault as well as any text associated with the device's area.

Maintenance

The system should be regularly tested once a month, as a minimum. The EL-2 control panel continuously monitors the status of the luminaire LEDs and stand-by batteries. Information on completed tests is stored in the memory of the panel and test reports can be printed for end-user records. Malfunction/alarm information is displayed on the screen of the keypad.

Cabling

Cabling of the **FIREscape®** system is easily and quickly achieved using traditional screened cable. Fire-rated cable is not required because each luminaire on the system contains an integrated rechargeable stand-by battery. Lighting lines are wired as radial circuits with spurring permitted. **FIREscape®** allows the connection of the cabling to luminaire bases before installing the emergency light units. Light units are fitted to the base with a simple and fast 'twist-fit' method, reducing installation time.

CONTROL CENTRE

Fault information from the **FIREscape®** emergency lighting system can be displayed using the optional EL-GRAPH graphic software which can show actual building floor-plans with activated areas and individual unit faults. The software can allow the **FIREscape®** emergency lighting system to be monitored from a control room/centre.

GSM

Remote monitoring of the EL-2 emergency lighting system control panel is possible utilising the GSM alarm transfer unit. Fault data is easily transmitted to end user or service company GSM numbers. Each GSM number can be stored in an 'alarm ring' so that each responsible person can be contacted in turn if any others are unavailable.



16M ADDRESSABLE EXIT SIGN – COMING SOON

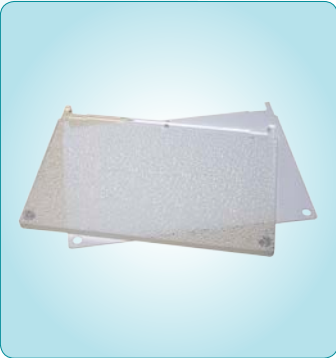


Ordering code	Straight – Single	EL-16S Kit
	Left – Single	EL-16L Kit
	Left – Double	EL-16LD Kit
	Right – Single	EL-16R Kit
	Right – Double	EL-16RD Kit
Kit Contents	Exit Sign Frame	EL-16-AS
	Reflective Worm backplate and rivets assy	EL-16G-AS
	Straight lens	EL-16G-S-AS
	Left lens	EL-16G-L-AS
	Right lens	EL-16G-R-AS
	Battery	EL-BAT450-AS (7.4v, 450mA, 3.33Wh)
Compatible base		EL-TSB
Operating voltage	24v-40v	
Minimum standby operating Time	+ 3hours	
Power consumption from line(W)	0.4 Watt	
LED life time	+100,000Hrs	
Dimensions (mm) including base	Wall mounted	TBA
	Ceiling mounted	TBA
Weight including battery (g)	TBA	
Temp range	40°C	
Material	Cup and Bracket	Fire retardant
	Lens	Acrylic
Fire class	UL94 V-0	
IP rating	IP20 (IP44 option available)	
Case colour	White (RAL9003 'Signal White')	
Approval	AS2293, AS/NZ60598.2.22, EN55015	

An LED-based, addressable 16m viewable exit light with a flexible ‘flex it’ hinge solution. The exit light’s hinge cup contains the electronics and stand-by battery and allows the unit to attach to the Hochiki EL-TSB mounting base. The cup also features a bicoloured status LED indicating charge/fault status (green for charging, red for fault), approved to AS2293.



EL-16-AS
16m Emergency Exit Sign Frame, white
(battery required)



EL-16G-AS
16m Reflective Worm
Back plate and Rivets Assy



EL-16G-S-AS
FIREscape 16m Lens, STRAIGHT

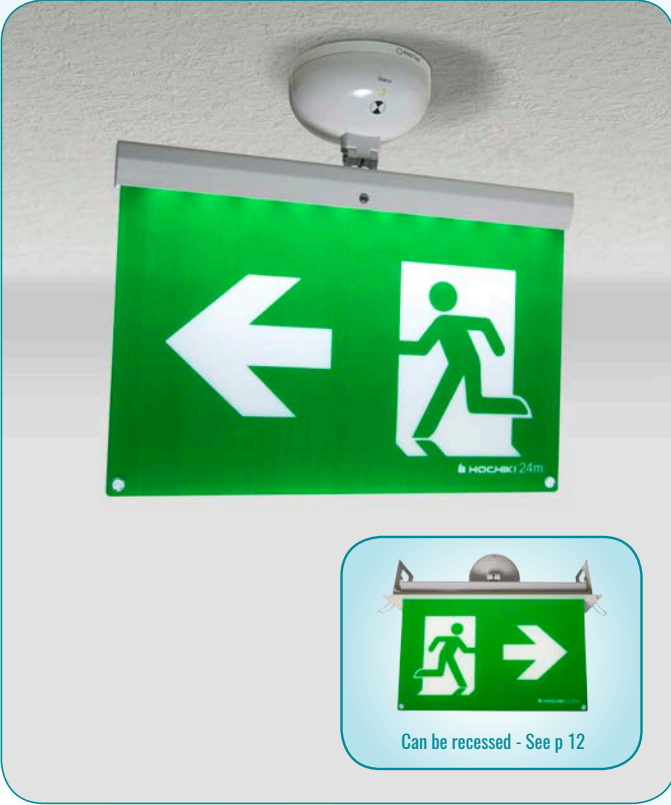


EL-16G-L-AS
FIREscape 16m Lens, LEFT arrow



EL-16G-R-AS
FIREscape 16m Lens, RIGHT arrow

24M ADDRESSABLE EXIT SIGN

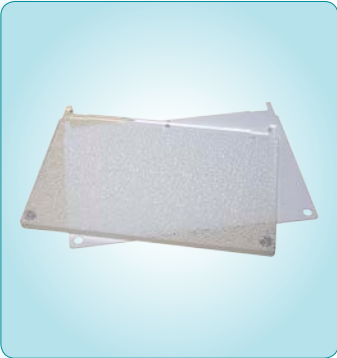


Ordering code	Straight – Single	EL-24S Kit
	Left – Single	EL-24L Kit
	Left – Double	EL-24LD Kit
	Right – Single	EL-24R Kit
	Right – Double	EL-24RD Kit
Kit Contents	Exit Sign Frame	EL-24-AS
	Reflective Worm backplate and rivets assy	EL-24G-AS
	Straight lens	EL-24G-S-AS
	Left lens	EL-24G-L-AS
	Right lens	EL-24G-R-AS
	Battery	EL-BAT450-AS (7.4v, 450mA, 3.33Wh)
Compatible base		EL-TSB
Operating voltage	24v-40v	
Minimum standby operating Time	+ 3hours	
Power consumption from line(W)	1.1 Watt	
LED life time	+100,000Hrs	
Dimensions (mm) including base	Wall mounted	328L x 280H x 100D
	Ceiling mounted	328L x 290H x 100D
Weight including battery (g)	790	
Temp range	40°C	
Material	Cup and Bracket	Fire retardant
	Lens	Acrylic
Fire class	UL94 V-0	
IP rating	IP20 (IP44 option available)	
Case colour	White (RAL9003 'Signal White')	
Approval	AS2293, AS/NZ60598.2.22, EN55015	

An LED-based, addressable 24m viewable exit light with a flexible ‘flex it’ hinge solution. The exit light’s hinge cup contains the electronics and stand-by battery and allows the unit to attach to the Hochiki EL-TSB mounting base. The cup also features a bicoloured status LED indicating charge/fault status (green for charging, red for fault), approved to AS2293.



EL-24-AS
24m Emergency Exit Sign Frame, white
(battery required)



EL-24G-AS
24m Reflective Worm
Back plate and Rivets Assy



EL-24G-S-AS
FIREscape 24m Lens, STRAIGHT



EL-24G-L-AS
FIREscape 24m Lens, LEFT arrow



EL-24G-R-AS
FIREscape 24m Lens, RIGHT arrow

EL-REC20 & EL-REC40 RECESS ADAPTOR



These recess adaptor brackets allow a semi-flush fitting of the EL-16 and EL-24 exit signs. The brackets need to be fitted with an exit sign and a mounting base (not supplied) and are equipped with spring loaded clips for secure fixing to most suspended ceiling materials. The brackets feature a small inspection hole in the ceiling plate which allows sight of the bicoloured status LED on the exit sign cup within the ceiling void.

Available in two sizes, EL-REC20 to fit the EL-16 16m viewable sign range and the EL-REC40 to fit the EL-24 24m viewable sign range.

Ordering Code	EL-REC20	EL-REC40
Adaptor bracket colour	White	White
Material	Powder-coated metal	Powder-coated metal
Dimensions (mm)	L250x W120 x H110	L380 x W120 x H110
Cut-out dimensions (mm)	L220 x W90	L350 x W90
Maximum ceiling thickness (mm)	35	35
Weight (g)	500	650
Approval	AS2293	AS2293

EL-KP LIGHTING SYSTEM KEYPAD



EL-KP is an emergency lighting control panel keypad for use with the EL-2 panel. The control panel is operated and interrogated through the compact backlit LCD graphical display of the keypad, which can show system status of the lighting units including battery charge and LED faults. One EL-2 control panel can support a total of 8 EL-KP keypad units, with up to a max of 15 panels on one system.

Ordering Code	EL-KP
Nominal voltage	12 V dc
Display	LCD graphical display 128 x 64 pixels
Display viewing area (mm)	60.0 x 32.5
Dimensions (mm)	147W x 144H x 29D
Material/colour	Metal alloy, powder coated/ivory
Weight (g)	410
Approval	AS2293

EL-2 ADDRESSABLE CONTROL PANEL



The EL-2 emergency light control panel features two lines, each line can accommodate 127 exit signs, route lights or I/O units. The EL-2 supplies the operational voltage to the light units during normal conditions, whilst also completing the continuous testing and monitoring of the equipment on the system. All monitored event information is saved in the memory of the control panel, and this can be accessed by a connected EL-KP key pad (see page 13).

NOTE: Must be used in conjunction with the EL-35V Transformer - see page 20.

Ordering Code	EL-2
Number of lights/signs supported	254
Connection voltage	35 V ac (220VA)
Nominal voltage	12 V dc
Internal batteries capacity	7.2 Ah
I/O outputs	2 relay outputs
Modem/PC connection	RS-232
User panel connection	RS-485/9600 baud
Event memory	500 events
Dimensions (mm)	270W x 345H x 90D
Material/Colour	Sheet steel, powder coated/White
Weight including batteries (kg)	8
Approval	AS2293

EL-DL2-AS CORRIDOR DOWN LIGHT



EL-DL2-AS is an LED-based, addressable corridor down light featuring one high-powered LED with a specially engineered dual surface free-form optic. The unit's body contains the electronics and the stand-by battery and features a bicoloured status LED indicating charge/fault status (green for charging, red for fault).

The unit has been designed to easily fit onto Hochiki's base, the EL-TSB.

Ordering code	EL-DL2 Kit	
Kit Contents	Corridor Down light	EL-DL2-AS
	Battery	EL-BAT450-AS (7.4v, 450mA, 3.33Wh)
Compatible base	EL-TSB	
Operating voltage	24v-40v	
Minimum standby operating Time	+ 3hours	
Power consumption from line(W)	0.1 Watt	
LED life time	+100,000Hrs	
Dimensions (mm)	100(diameter) x 48(height) (inc 8mm for EL-TSB)	
Weight including battery (g)	100	
Temp range	40°C	
Case material	Fire resistant PC + ABS plastic (FR3010)	
Fire class	UL94 V-0	
IP rating	IP20 (IP67 option available)	
Case colour	White (RAL9003 'Signal White')	
Approval	AS2293, AS/NZ60598.2.22, EN55015	
Classification	C0-C2, C90-E25	

EL-DL3-AS OPEN SPACE DOWN LIGHT



EL-DL3-AS is an LED-based, addressable open space down light featuring one high-powered LED with a specially engineered dual surface free-form optic. The unit's body contains the electronics and the stand-by battery and features a bicoloured status LED indicating charge/fault status (green for charging, red for fault).

The unit has been designed to easily fit onto Hochiki's base, the EL-TSB.

Ordering code	EL-DL3 Kit	
Kit Contents	Open Area Down light	EL-DL3-AS
	Battery	EL-BAT450-AS (7.4v, 450mA, 3.33Wh)
Compatible base	EL-TSB	
Operating voltage	24v-40v	
Minimum standby operating Time	+ 3hours	
Power consumption from line(W)	0.1 Watt	
LED life time	+100,000Hrs	
Dimensions (mm)	100(diameter) x 48(height) (inc 8mm for EL-TSB)	
Weight including battery (g)	100	
Temp range	40°C	
Case material	Fire resistant PC + ABS plastic (FR3010)	
Fire class	UL94 V-0	
IP rating	IP20 (IP67 option available)	
Case colour	White (RAL9003 ' Signal White')	
Approval	AS2293, AS/NZ60598.2.22, EN55015	
Classification	C0:E6.3, C90:E6.3	

NF89-C-AS HIGH POWER CORRIDOR DOWN LIGHT



The NF89-C-AS Corridor luminaire is an addressable processor controlled device using modern LED technology and is equipped with a battery. It uses one conductor pair for both power and communication. The conductors are connected to a separate round mounting base onto which the luminaire is mounted. The luminaire uses a bigger battery than standard and needs a battery spacer NFW/BS. The battery is mounted into the spacer and the spacer is connected to the luminaire with bayonet fix. The package is then mounted onto the base.

The luminaire can be ordered with corridor lens NF89-C-AS or with open area lens NF89-O-AS

Ordering code	NF89-C Kit	
Kit Contents	High Power Corridor Down light	NF89-C-AS
	Battery	EL-BAT2950-AS (7.4v, 2950mA, 21.46Wh)
Compatible base	EL-TSB	
Operating voltage	24v-40v	
Minimum standby operating Time	+ 3hours	
Power consumption from line(W)	0.6 Watt	
LED life time	+100,000Hrs	
Dimensions (mm)	100(diameter) x 65(height) (inc 8mm for EL-TSB and battery spacer base)	
Weight including battery (g)	290	
Temp range	40°C	
Case material	Aluminium	
IP rating	IP20	
Case colour	White (RAL9003 ' Signal White')	
Approval	AS2293, AS/NZ60598.2.22, EN55015	
Classification	C0:D6.3, C90:D32	

NF89-O-AS HIGH POWER OPEN SPACE DOWN LIGHT



The NF89-O-AS Open Area luminaire is an addressable processor controlled device using modern LED technology and is equipped with a battery. It uses one conductor pair for both power and communication. The conductors are connected to a separate round mounting base onto which the luminaire is mounted. The luminaire uses a bigger battery than standard and needs a battery spacer NFW/BS. The battery is mounted into the spacer and the spacer is connected to the luminaire with bayonet fix. The package is then mounted onto the base.

The luminaire can be ordered with corridor lens NF89-C-AS or with open area lens NF89-O-AS.

Ordering code	NF89-O Kit	
Kit Contents	High Power Open Down light	NF89-O-AS
	Battery	EL-BAT2950-AS (7.4v, 2950mA, 21.46Wh)
Compatible base	EL-TSB	
Operating voltage	24v-40v	
Minimum standby operating Time	+ 3hours	
Power consumption from line(W)	0.6 Watt	
LED life time	+100,000Hrs	
Dimensions (mm)	100(diameter) x 65(height) (inc 8mm for EL-TSB and battery spacer base)	
Weight including battery (g)	290	
Temp range	40°C	
Case material	Aluminium	
IP rating	IP20	
Case colour	White (RAL9003 'Signal White')	
Approval	AS2293, AS/NZ60598.2.22, EN55015	
Classification	C0-E40, C90-E40	

NFW68/89-RA RECESS ADAPTOR



The NFW68/89-RA is a mounting adaptor for the Emergency Lighting product range and their associated mounting bases. It allows a base and light combination to be flush mounted by providing a recess fixing in the ceiling. *(shown with luminaire fitted – not supplied)*

Allows all current FIREscape luminaires to be flush mounted: EL-DL2-AS, EL-DL3-AS, NF89-O-AS, NF89-C-AS

Ordering Code	NFW68/89-RA
Operating Temperature Range	-10°C to + 50°C
Storage Temperature Range	-30°C to + 60°C
Maximum Humidity	95%RH - Non Condensing (at 40 °C)
Colour / Material	White / ABS
Weight (g) / Diameter (mm) / Height (mm)	65 / 140 / 44
Height when fitted flush (mm)	3
Drilled Hole Size (mm)	128
Approval	AS2293

EL-SL ADDRESSABLE STEP LUMINAIRE



An LED-based, addressable step lighting unit, which is installed semi-flush. The stand-by battery is contained within the unit.

Although low-level lighting is not a requirement under AS2293 this attractive and discreet unit is ideal for lighting stairway treads and changes in floor levels.

Ordering Code	EL-SL
Case colour	White (RAL 9003 "Signal White")
Material	Fire resistant PC + ABS plastic (FR3010)
Fire class	UL94 V-0
Operation time	1 h/3h
Dimensions (mm)	80W x 80H x 12D
Weight including battery (g)	110
Drilled Hole Size (mm)	128

ACCESSORIES



EL-PSU
is a bus-controlled Power Supply, which operates with the **FIREscape**® system providing charge to luminaire batteries.

NOTE: A remote power supply is required to power any non-addressable slave luminaires.

- ▶ Switched-mode power source
- ▶ Parallel connection for outputs max. 2.5 mm²
- ▶ Outputs: 12 V dc / 24 V dc (2 x 5 A)
- ▶ Batteries: 2 units, 7 Ah / 1 hr standby time
- ▶ Group-specific monitoring of emergency lighting
- ▶ Controlled using EL-IO units
- ▶ Designed for 12/24 lights



EL-35V
is a transformer for the EL-2 emergency light control panel.

- ▶ 35 VAC, 220 VA
- ▶ Input: 230 V ac
- ▶ Output: 35 V ac / 220 VA
- ▶ Protection class: IP44
- ▶ Operational temperature: max. 30°C
- ▶ Wall installation: with three screws
- ▶ Manufacturing class: SS 4270203 (EN60742)
- ▶ Weight: 3.2 kg



EL-PM
is an under-voltage monitoring device that constantly assesses the condition of a mains lighting circuit. When the lighting circuit is deemed faulty, the unit will provide a signal that can be relayed to the control equipment to initiate emergency luminaire activation.

- ▶ Triggers at 75% of the nominal lighting circuit supply
- ▶ DIN Rail mounted
- ▶ Power and output indications



EL-BAT450-AS
is a rechargeable Lithium/Polymer back-up battery for use with luminaires and exit signs within the **FIREscape**® range.

- ▶ 450 mAh
- ▶ 7.4 V
- ▶ For use with FIREscape luminaires and exit signs
- ▶ Ideal for cold facilities, minimum operating temperature -25°C
- ▶ Provides minimum 3h backup time (AS2293 requires 1.5h)
- ▶ Incorporates deep discharge protection circuitry



EL-BAT2950-AS
is a rechargeable Lithium/Polymer back-up battery specifically for use with the NF89-O-AS and NF89-C-AS luminaires within the **FIREscape**® range.

- ▶ 2950 mAh
- ▶ 7.4V
- ▶ For use with the NF89-O-AS and NF89-C-AS

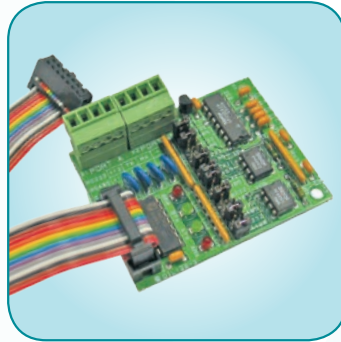
ACCESSORIES



EL-BDC

is a battery monitoring card for use with the EL-2 Emergency Light Control Panel.

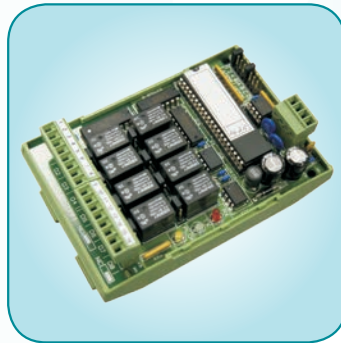
- ▶ The unit is used to prevent the deep discharge of the panel's battery during long-duration (over 50 h) power outages



EL-EXP

is an expansion unit used for expanding the serial ports of the EL-2 Emergency Light Control Panel. The unit provides two additional ports, SER1 and SER2.

- ▶ Provides two additional serial ports within the control panel
- ▶ Ports can be configured either as RS-232 or RS-485
- ▶ Four integral LEDs to indicate communications



EL-8RC

is a relay card which adds 8 relay outputs to the EL-2 Emergency Light Control Panel. Each output can be programmed with all necessary functions, including links to other systems. Up to 4 cards can be connected to the panel simultaneously.

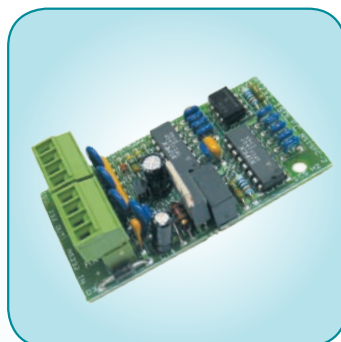
- ▶ Provides 8 relay outputs 1A at 30V
- ▶ RS-485 channel connection (DIL-128)
- ▶ A total of 4 cards can be connected to the same channel
- ▶ Dimensions: 110 x 75 x 42mm
- ▶ Fits to DIN rail



EL-IO

is an I/O unit which is connected to a line of the EL-2 Emergency Light Control Panel, from which it receives its power. The unit links test switches and phase monitors to the **FIREscape**® system.

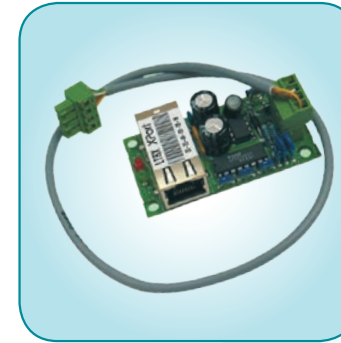
- ▶ 4 inputs - can be configured as opening or closing
- ▶ 2 outputs - can be configured as N/O or N/C
- ▶ Dimensions: 110 x 110 x 35 mm



EL-ISOL

is an isolator device which should be used when connecting external equipment to the EL-2 Emergency Light Control Panel's RS232 outputs, to avoid ground leakages.

ACCESSORIES



EL-LAN

is an RS232 to Ethernet adapter, designed for connecting the EL-2 Emergency Light Control Panel to an Ethernet network.

- ▶ 10/100 Mbit/s
- ▶ Operational voltage 9-30 V dc
- ▶ Power feed from the EL-2 Emergency Light Control Panel (PRG screw connector)
- ▶ Maximum distance from the panel is 200m



EL-SWT5

is a 5-port Ethernet switch which can be used for splitting an Ethernet network and extending CAT cabling.

- ▶ RJ45 connectors
- ▶ Maximum distance to the next switch or terminal unit 100m
- ▶ 10/100 Mbit/s
- ▶ Operational voltage 18.5 to 30.2 V dc
- ▶ Electricity consumption ~ 90 mA (at 24 V dc)



EL-SWT8

is an 8-port Ethernet switch which can be used for splitting an Ethernet network and extending CAT cabling.

- ▶ as per EL-SWT5 above



EL-TSB

is a common mounting base which is used to mount the **FIREscape**® range of luminaires and exit signs.

- ▶ Test switch
- ▶ Stainless steel contacts
- ▶ Accepts 2.5 mm² conductors
- ▶ Quick and easy 'twist on' connection of luminaires



TCH-B200

is a Hand Held Address Programmer designed to address the **FIREscape**® range of luminaires and exit signs. Designed to be light, robust and easy to use it operates from a single PP3 size battery.

- ▶ Lightweight design
- ▶ Quick and reliable addressing
- ▶ Over 8000 address settings from one battery

(shown with luminaire fitted – not supplied)

ACCESSORIES



EL-DE

is an external weather-proof enclosure designed to allow the external mounting of the EL-DL down lights. The enclosure features one cable entry which can be glanded and provides an ingress protection rating of IP67.

(shown with luminaire fitted – not supplied)

- ▶ Robust design
- ▶ Provides IP67 protection
- ▶ Cable entry can be glanded
- ▶ Metal, powder-coated body, acrylic dome



EL-DEB

is an external weather-proof enclosure and bracket designed to allow the external mounting of the EL-DL3 open space down light. The bracket section features two cable entries which can be glanded and provides an ingress protection rating of IP67.

(shown with luminaire fitted – not supplied)

- ▶ Suitable for EL-DL3 only (open space down light)
- ▶ Robust design
- ▶ Provides IP67 protection
- ▶ 2 cable entries can be glanded
- ▶ Metal, powder-coated enclosure and bracket, acrylic dome



SBB-1

A back box providing a secure fixing for the **FIREscape**® luminaires and mounting base. Provides an aesthetically pleasing solution where surface fixed devices are required. The housing supports four 20mm glanded entries for cabling access.

- ▶ 4 Glanded cable entry holes (glands not supplied)
- ▶ Colour matched
- ▶ Provides moisture and dust resistant fixing



EL-MC

is a media adaptor capable of converting a dual cable to Ethernet in order to extend an Ethernet network across a dual cable connection

- ▶ RJ45 connector for Ethernet / screw connector for dual cable
- ▶ Max range up to 10 km* resulting in a max transfer capacity 15.3 Mbps*
- ▶ Installation in pairs ('master' and 'slave' units)
- ▶ No MAC or IP addresses
- ▶ Supply voltage 18 - 30 Vdc
- ▶ Max current consumption 180 mA

*Depending on data rate and cable cross section.



EL-1RC

is a relay card for use with the EL-2 Emergency Light Control Panel.

- ▶ Equipped with one volt-free relay output which can be set as N/O or N/C
- ▶ Control voltage 12 V dc
- ▶ Electricity consumption 37.5 mA (at 12 V dc)
- ▶ Dimensions: 50 x 37 mm

ACCESSORIES



EL-BBA1

A BESA Box Adaptor Plate which allows adjustment of the mounting base to allow correct alignment of exit signs and luminaires. Supplied with fixing screws.



YZU-A

The YZU-A is an angled ceiling bracket. It allows all current **FIREscape**® luminaires to be mounted: EL-DL2-AS, EL-DL3-AS, NF89-O-AS & NF89-C-AS

(shown with base fitted – not supplied)

- ▶ Easy to install
- ▶ Allows the luminaires and mounting base to be angled



YZU-B

The YZU-B is a fixed angle wall bracket. It allows all current **FIREscape**® luminaires to be mounted: EL-DL2-AS, EL-DL3-AS, NF89-O-AS & NF89-C-AS where the detector cannot be fixed to a ceiling surface.

- ▶ Easy to install
- ▶ Requires a mounting base for the luminaires



EL-FS

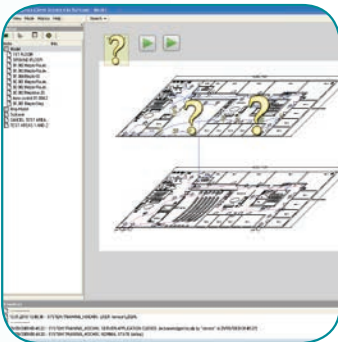
EL-FS is 'flap support' type fixing that also provides the option for the emergency lightings and exit signs to be suspended.



EL-CS

EL-CS is a ceiling support fixing that also provides the option for the emergency lightings and exit signs to be suspended.

SOFTWARE



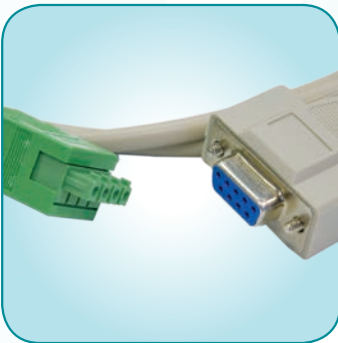
EL-GRAF
is an alarm graphics package which allows the end-user to visually check on the status of the complete FIREscape system, down to individual point status.

- ▶ Fully integrated graphics package
- ▶ Individual point monitoring
- ▶ Reports point status information
- ▶ Point interrogation and control



EL-IMP
is a configuration and programming software tool for use with the EL-2 emergency lighting control panel.
The software is used to configure light levels, set up lighting areas and create input and output parameters during set-up and commissioning.

- ▶ Allows configuration of luminaires
- ▶ Allows configuration of input/output devices
- ▶ Assists in fault finding
- ▶ Allows uploading and downloading of data
- ▶ Assists in report generation and retrieval



EL-CAB
is a connection cable for use between the EL-2 Emergency Light Control Panel and a PC/laptop.



EL-USB
adaptor for use in conjunction with the EL-CAB for connection to PCs/laptops that don't feature a Serial Port.

PHOTOMETRIC DATA Spacing table (distance between fittings)

A minimum light level of 0.2Lux.

EL-DL2-AS Corridor Luminaire



(m)		Mounting Heights															
Classification		2.1	2.4	2.7	3.0	3.3	3.6	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	15.0	20.0
C0	C2	4.1	4.1	4.1	3.9	3.7	3.3	2.6									
C90	E25	9.0	10.0	10.8	11.4	12.2	12.8	13.6	14.4	15.2	16.6	17.4	18.2	18.6	18.6	17.4	

EL-DL3-AS Open Luminaire



(m)		Mounting Heights															
Classification		2.1	2.4	2.7	3.0	3.3	3.6	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	15.0	20.0
C0	E6.3	7.0	7.6	8.0	8.4	8.6	8.8	9.2	9.4	9.4	8.8	8.2	7.0				
C90	E6.3	7.0	7.6	8.0	8.4	8.6	8.8	9.2	9.4	9.4	8.8	8.2	7.0				

NF89-C-AS High Power Corridor Down Light



(m)		Mounting Heights															
Classification		2.1	2.4	2.7	3.0	3.3	3.6	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	15.0	20.0
C0	D6.3	8.6	8.8	9.0	9.1	9.2	9.2	9.2	9.0	8.7	7.7	5.7					
C90	D32	15.4	16.1	16.7	17.2	17.6	18.0	18.5	19.1	19.5	20.2	20.6	20.7	20.6	20.3	14.6	

NF89-O-AS High Power Open Space Down Light



(m)		Mounting Heights															
Classification		2.1	2.4	2.7	3.0	3.3	3.6	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	15.0	20.0
C0	E40	9.6	10.6	11.6	12.4	13.2	14.0	15.0	16.0	17.0	18.8	20.2	21.4	22.2	22.8	22.0	18.4
C90	E40	9.6	10.6	11.6	12.4	13.2	14.0	15.0	16.0	17.0	18.8	20.2	21.4	22.2	22.8	22.0	18.4

DESIGN GUIDE

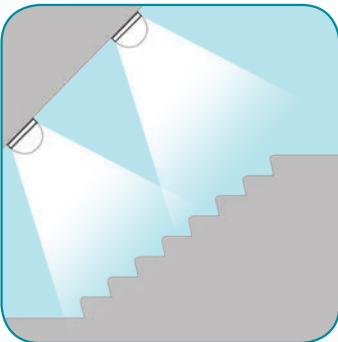


Non-Maintained
Non Maintained emergency escape luminaire and exit sign is when all emergency lighting lamps are in operation, only when the supply to normal lighting fails.

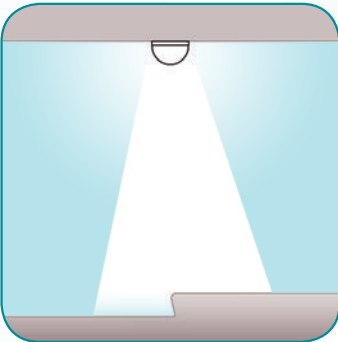


Maintained
Maintained emergency escape luminaire and exit sign is when all emergency lighting lamps are energised at all times when normal or emergency lighting is required.

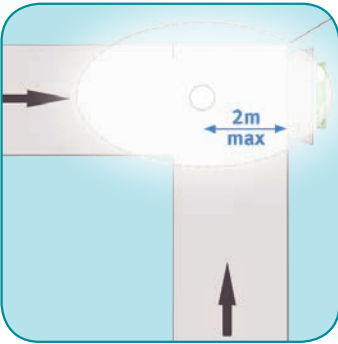
Points of Emphasis



Near Stairs
In such a manner that each flight of stairs including the associated landings receive direct light.



Near Changes of Level
Within 2m of any change of floor level on low side.



Exit Doors
Within 2m of the approach side of each doorway requiring an exit.



Exit Sign Mounting/Location
Mounting heights shall not be less than 2m and not more than 2.7m above floor level, or immediately above the door way if the doorway is higher than 2.7m.



Near Each First Aid Point, defibrillator



Near Fire Fighting Equipment and Manual Call Points



To illuminate Safety Signs of hazardous areas such as:

- Kitchen
- Elevator
- Receptions
- Swimming pools/slip hazards

Warning: The purpose of this Design Guide is to provide a simplified overview of the installation requirements under AS2293 as at 1 April 2017. This document is not intended to be used as a substitute for AS2293 and should not be relied upon as an accurate, comprehensive or up-to-date reflection of the applicable Australian Standard(s). It is your responsibility to ensure that installation of emergency lighting and exit signs is in compliance with all applicable Australian Standards and any other legal requirements. Hochiki Australia Pty Ltd will not take responsibility for any loss or damage due to your non-compliance with AS2293, any other applicable standards or legal requirements.



Project List in EU

Hochiki's innovative, cost-saving Emergency Lighting system, **FIREscape**[®], has been installed in many prestigious projects. The following list shows a number of major applications where **FIREscape**[®] products were specified and installed:

Commercial & Retail

- | | |
|-------------------------------|-----------------------|
| Leeds Federated Housing Trust | Leeds, UK |
| Wessex Housing | Basingstoke, UK |
| Tetrosyl Chemicals | Bury, UK |
| Newcastle Airport | Newcastle, UK |
| Lielahiti, Commercial College | Tampere, Finland |
| Teletalo Building | Lappeenranta, Finland |

Health

- | | |
|--------------------------------|-----------------------|
| Alnwick Hospital | Northumberland, UK |
| St Faiths Care Home | Cheltenham, UK |
| John Groomes Court | Norwich, UK |
| Harplands Hospital | Stoke on Trent, UK |
| Royal Bolton Hospital | Bolton, UK |
| Lady of Lourdes Hospital | Drogheda, Ireland |
| Port Lois Hospital | Ireland |
| Alvernina Hospital | Ireland |
| St James Hospital | Dublin, Ireland |
| Etelä-Karjala Central Hospital | Lappeenranta, Finland |
| Mikkeli Central Hospital | Mikkeli, Finland |
| GOSH | London |
| Sligo Regional Hospital | Dublin, Ireland |

Leisure & Entertainment

- | | |
|------------------------------|----------------------|
| ShIPLEY Swimming Pool | Yorkshire, UK |
| Richard Dunn Sports Centre | Bradford, UK |
| Beeston Library | Nottingham, UK |
| Sandman Hotel | Newcastle, UK |
| Cotton Hotel | Winsford, UK |
| Hämeenlinna Ice Hockey Arena | Hämeenlinna, Finland |
| Raati Sports Center | Oulu, Finland |
| Kenneth Moore Theatre | London, UK |

Education

- | | |
|---|-----------------------|
| Teesside University | Middlesbrough, UK |
| Oxford University Student Accommodation | Oxford, UK |
| Manchester University | Manchester, UK |
| University of Brighton | Brighton, UK |
| Etelä-Karjala Technical College | Lappeenranta, Finland |

Government & Administrative

- | | |
|----------------------------|----------------|
| Tonbridge District Council | Kent |
| Rutherford Laboratory | Didcot, Oxford |

NOTES

A large, light blue silhouette of a person in a dynamic, forward-leaning pose, possibly running or jumping, set against a background of horizontal dashed lines. The figure is positioned in the center-right of the frame, with its head tilted back and arms extended forward. The background consists of a light blue gradient with horizontal dashed lines in a slightly darker shade of blue. The overall style is minimalist and modern.

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