



ENDURANCE3

EMERGENCY LUMINAIRES

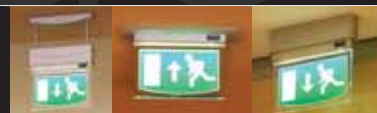


SPECIFICATION GUIDE

consider...

Choosing an emergency luminaire which gives you
a unique style of product.

unique



the design

Stylish enough to look good in the most prestigious of projects, matched with leading edge technical design, to give you a bespoke fitting which will complement any building interior.



A luminaire which offers flexible mounting , allowing you to fit in the most awkward space with different, attachable accessories. The versatility of Endurance enables the same luminaire to be used, anywhere, to give a consistent, stylish look throughout a building.

ENDURANCE3

THE ART OF LUMINAIRE DESIGN

then consider...

The advanced technological features which makes these luminaires superior in their performance.

Superior



the performance

ADVANCED 'ENERGY SAVING' TECHNOLOGY

A cold cathode fluorescent lamp with a long life expectancy of over 50,000 hours. The cold cathode lamp draws 6W of power compared to 11W for a conventional 8W tube. This gives a saving of £3.00 per fitting per year.

MINIMAL MAINTENANCE

The cold cathode lamp, advanced battery charging and quality components enables a long lifespan of at least 4 years without maintenance.

ASSURED PERFORMANCE

Intelligent self test is standard. All fittings are designed to fully comply with EN60 598-2-22

EASY 'FIRST FIX' INSTALLATION

Luminaires have a First-Fix design which allows full wiring of the universal base unit with a positive snap-in fixing of the luminaire body.



THE POWER OF PERFORMANCE

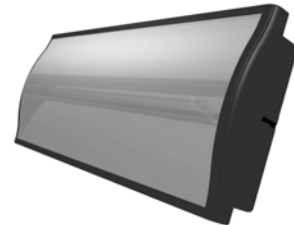


Endurance is the first emergency lighting system to give the specifier a truly bespoke luminaire; one that combines long-life components with unique mounting options and stunning designer looks.

THE ART OF ENDURANCE

Although emergency lighting is necessary as a life safety system it should not be intrusive to an architectural theme. From a specifier's point of view it is understood that simplicity and functionality are important features when selecting any type of lighting for a building.

Endurance is built into two simple modern luminaire styles. Both benefit from innovative design with care being taken on look, finish, flexibility, durability as well as the latest technological advances, giving a minimum life span of 4 years - without maintenance.



ENDURANCE RANGE FEATURES

Endurance Exit Luminaire

The Endurance exit sign is versatile enough to be installed in the most awkward space. With a range of mounting accessories especially designed to enhance the fittings flexibility, designers can now choose from wall, ceiling, recessed and suspended fixings, with rods or wires, as well as a unique horizontal version for installations where space is restrictive.

Endurance Express Luminaire

A luminaire that completes the range, complementing the sign for a total emergency lighting scheme. Optically engineered for economic spacing along an escape route or open-plan lighting. Available for wall or ceiling mounting and semi-recessable.

For both styles standard finish is white, other colour options being classic black or smart silver.

stunning designer looks

the art of luminaire design



STYLE

MOUNTING OPTIONS

Installation is straightforward with all Endurance fittings. Using a 'first-fix' plate which can be installed and tested. The luminaire unit simply clicks in place when required. The connection between the First Fix and product will be simultaneous mechanical and electrical. The facility is simple and incorporates an arrangement so that it is easy and simple to install. First-Fix is also available for recessing.



Endurance is also extremely durable and its use of leading edge technology means that maintenance is minimal. The cold cathode fluorescent lamp has a life expectancy of over 50,000 hours continuous use. Advanced microprocessor technology enables intelligent charging and inverter operation to maximise battery and lamp lifetime to over 4 years.

So with low maintenance, easy installation and alluring designer looks, Endurance is the embodiment of practical style that lasts.



distinctive



ASSURED

EMERGENCY LIGHTING SELF-TEST AS STANDARD

As part of a life safety system, Endurance has been specifically designed to provide optimum performance, reliability and a long maintenance free life, offering major benefits to the user and installer.

All Endurance luminaires have an in-built self-testing system [EST], ensuring all testing and fault identification is handled automatically. This feature will be offered as standard on all versions of the product. The fitting will do weekly operation checks, the luminaire and conduct its own full duration test after 1 year.

The luminaire will indicate a fault if any of the functions are operating incorrectly:

Normal Healthy Conditions - No action required				
GREEN LED	AMBER LED	EMERGENCY LAMP	MEANING	
On	Off	On	Unit Healthy in maintained mode	
Flashing	Off	On	Luminaire in test or awaiting commissioning test	
Fault Conditions - All of these conditions require actions				
GREEN LED	AMBER LED	EMERGENCY LAMP	MEANING	ACTION
Off	Off	Off	Battery discharged	Check supply
Off	Off	On	Emergency mode	Check supply
The following condition indicates that the luminaire is faulty				
GREEN LED	AMBER LED	EMERGENCY LAMP	MEANING	ACTION
Off	On	On or Off	General Fault	Repair

in-built Endurance self-test

PERFORMANCE

The key functional elements to this unit are the lamp, battery and circuit. Endurance uses long life components including lamp and batteries that will enable the product to endure a period of at least 4 years without replacement parts. After this period, in the unlikely event, that a fault occurs, then simply unplug and fit a new luminaire body.

In essence 'Endurance' does not require any user intervention, maintenance or replacement, of its parts, over a long period of time, giving confidence and peace of mind to the user, whilst minimising maintenance costs.



EMERGENCY LIGHTING OPERATION

COLD CATHODE LAMP

Pencil thin, the special lamp features ultra long life cathodes. In conjunction with a special gas-fill and phosphor this assures a very long life with good energy efficiency.



ENERGY SAVING

A conventional 8W tube has a life expectancy of 5,000 hours and will need changing at approximately 9 monthly intervals. Its performance also degrades as it nears its end of life. The saving in maintenance to change tubes can represent £3.50 per year.

Over the guaranteed 4 year life cycle of the fitting, savings over conventional 8W fittings can total £26.00. On buildings containing say 100 fittings, this is a substantial saving. With longer tube and battery life, coupled with energy savings, Endurance helps us to recognise our 'green product' responsibilities.

CONTROL CIRCUIT

An off-line switching regulator powers the circuit. This removes the need for a conventional mains transformer and reduces heat generated by the power supply so extending component life. The entire luminaire is controlled by a small microprocessor that manages all luminaire functions (e.g. controls the charge regime; the automatic testing [EST] and even adjusts for variation of lamp output).

BATTERY

The batteries are hi-temperature conventional NiCd. However, the charger provides dual rate charging to minimise overcharge and hence extend life. Using subC batteries allowed a compact design to be realised.

QUALITY

Endurance has been designed to meet the EMC and LVD Regulations and fully complies with luminaire safety standard EN60598 2.22. The main enclosure is made of resilient fire retardant polycarbonate and all exterior housing plastic parts comply with the 850° hot glow wire test.

VERSATILITY

Siting the Endurance fitting in any location is made possible by supplying a 'base' product to which accessories are added to make up the various options. The base product is a surface mounting signage luminaire and the sign-plate itself **which is sold separately**. Adding accessories forms all other versions.

These accessories are mechanical components and the functional part of the luminaire remains unchanged, thus only one type of spare luminaire is required for each colour option. This makes for a completely integrated product range whose design; styling and colours instil an image of quality, elegance innovation and leadership in the market.

OPTIONS



BASE UNIT (shown with signplate)

Comprises: A first-fix plate, luminaire body complete with lamp, batteries, circuit and sign-plate cover. The first -fix plate has a 5-way terminal block to which all the electrical connections are made. The luminaire body 'snaps' into the First-Fix plate and the sign-plate cover snaps onto the body and hides the lamp etc. The sign-plate is the main accessory **and is sold separately** to the base unit. Available with different directional arrows and as single sided or double sided versions.

* **Signplate sold searately**



HORIZONTAL (unique mounting)

Attachment is available which allows the luminaire to be mounted horizontally with the signplate hanging vertically. This kit consists of a reflector to redirect light to the signplate, an alternative signplate cover and screws to secure the signplate.

* **Signplate sold searately**



RECESSED KIT

Recessed kit includes a recessing cage, trim plate and fasteners. The recessing cage has side wings that are used to secure the cage to the ceiling. The luminaire is installed by simply pressing it into place and replacing the cover.

* **Signplate sold separately**



SUSPENSION KITS

The suspension mounting is available in 2 basic forms, either as a wire suspension or by twin rod mounting. The adjusting device for the wire is pulled through a clutch mechanism until the desired length is reached, then the wire is cut to length. The ability to cut the wire to length makes this version especially suitable for angled mounting surfaces where different lengths of wire need to be achieved. The cut end does not enter the first-fix plate so cannot chafe electrical wiring or compromise safety.

A number of rod suspension kits are available for specific mounting heights.

* **Signplate sold searately**



WALL BRACKETS

The bracket moulding features a ratchet detail allowing the sign to be angled at virtually any angle to the wall, specifically parallel and perpendicular mountings.

* **Signplate sold searately**



COLOUR CHOICES

Standard colour - White



Other colours

Classic Black



Smart Silver





ENDURANCE
EMERGENCY LUMINAIRES



 **EMERGI-LITE**
EMERGENCY LIGHTING & FIRE DETECTION SPECIALISTS

Emergi-Lite Safety Systems Ltd
Bruntcliffe Lane Morley Leeds LS27 9LL
Tel: +44 (0)113 281 0600
Fax: +44 (0)113 281 0601
E-mail: quotes@emergilite.co.uk
www.emergilite.co.uk


DANTZIGUIAN HRAYR
Automation Systems sarl
RC:20094 - Baabda

Phone: +961 1 683 770 (3lines) / +961 3 655 965 / Fax: +961 1 683 769
P.O. Box: 55344 - Sin El Fil - Lebanon
Office: Dantziguian Hrayr Bldg, 171 Sami Solh Street, Mkalles
[http:// www.dhas.com.lb](http://www.dhas.com.lb)
e-mail: support@dhas.com.lb

Member of Thomas & Betts

Thomas & Betts