Emergency Lighting

The way forward

Solutions that are:

- **Affordable**. Cost effective. Rapid pay-back
- **Compliant** with standards & best practice
- **Delivering increased building safety**
- **For all sizes and types of building**

Emergency Lighting

Have you got it covered?

Almost all buildings require emergency lighting, and there are stiff penalties for getting it wrong.

The weakest link in emergency lighting is the human who does the testing. If they skip a test, or fail to spot a malfunctioning fitting, then safety-critical maintenance won't get done.

Self-test emergency fittings overcome these problems and new technology is making self-test more affordable than ever.

Emergency Lighting

We have it covered

LITHIUM

Lithium batteries unlock the potential of self-test emergency lighting

Self-test emergency lighting performs all the monthly and annual tests required, but without human involvement. Every month, through holidays, Christmas and illness, the tests get done and the costs are saved.

Old technology nickel cadmium (NiCd) batteries had no warranty, so nobody could guarantee that the savings from using self-test would ever be realised.

Now, with lithium technology, warranted for 7 years, the savings keep adding up – year after year.

SELF-TEST EMERGENCY FITTINGS + LITHIUM ***BATTERIES INSIDE*** = Up to **400%** **ROI** OVER 7 YEARS

- Automated testing
- 11 x monthly, 1 x annual
- No labour required
- Visual feedback
- Audible feedback
- BS5266 compliance
- Lithium technology
- 7 year warranty *(*terms & conditions apply – see below)*
- 8 year design life
- 40% energy saving v NiCd
- The green solution

***Here's the small print.** Our 7 year warranty covers the light fitting AND the batteries. The warranty doesn't start from the date of manufacture or the date of sale – it starts from the date of installation. End of small print.*

Self-test and Lithium Batteries
A winning combination

Emergency lighting
Testing

BS5266 requires a short functional test each month and a full discharge test (3 hours) every year.

Testing can be done in 3 ways: Manual test, self-test and addressable self-test.

- **Manual test**.
  A competent person has to walk round the building, isolating the permanent live supply and then observing how each emergency fitting performs. This is **time-consuming**, **costly & unreliable.** Also**,** and end-users have no way to spot any failures the tester might have missed.

- **Self-test.**
  Each fitting tests itself and indicates if there are any faults with flashing red or yellow LEDs and a warning buzzer. Failures are easy for anyone to spot. **No wasted time**. **Economical. Reliable.**

- **Addressable self-test.**
  A central control system communicates with the individual fittings using DALI. It schedules tests, which are carried out automatically, and collates the test results. Commissioning is required. Suitable for larger installations. **Convenient** and **reliable**.

	Manual test	*Self-test*	*Addressable self-test*
Initial purchase cost	**Lowest**	**Medium** Self-test fittings cost c37% more than manual test fittings	**Highest cost**
£ Pay-back	**Worst value**	**Excellent.** <2 years Over the warranted 7 year life the return is >3 times the outlay	**Project dependant**
Installation cost	**Medium cost** Key-switches are required	**Lowest cost** No key-switches are required and no DALI bus	**Highest cost** DALI bus required
Running cost	**Highest cost** Monthly and annual tests required	**Lowest cost** All testing is automated. Zero labour costs.	**Lowest cost** All testing is automated. Zero labour costs.
Testing reliability	**Low** Testing is easily overlooked. Individual fittings can be missed	**High** No human involvement. Fully automatic	**High** No human involvement. Fully automatic
Fault reporting reliability	**Low** Totally dependent on the tester. No scope for end-users to spot and report failures	**High** Visual and audible warnings are obvious to end-users.	**High** Visual and audible warnings, plus central reporting
System integrity	**At risk**	**Assured**	**Assured**

Lithium with self-test
The payback

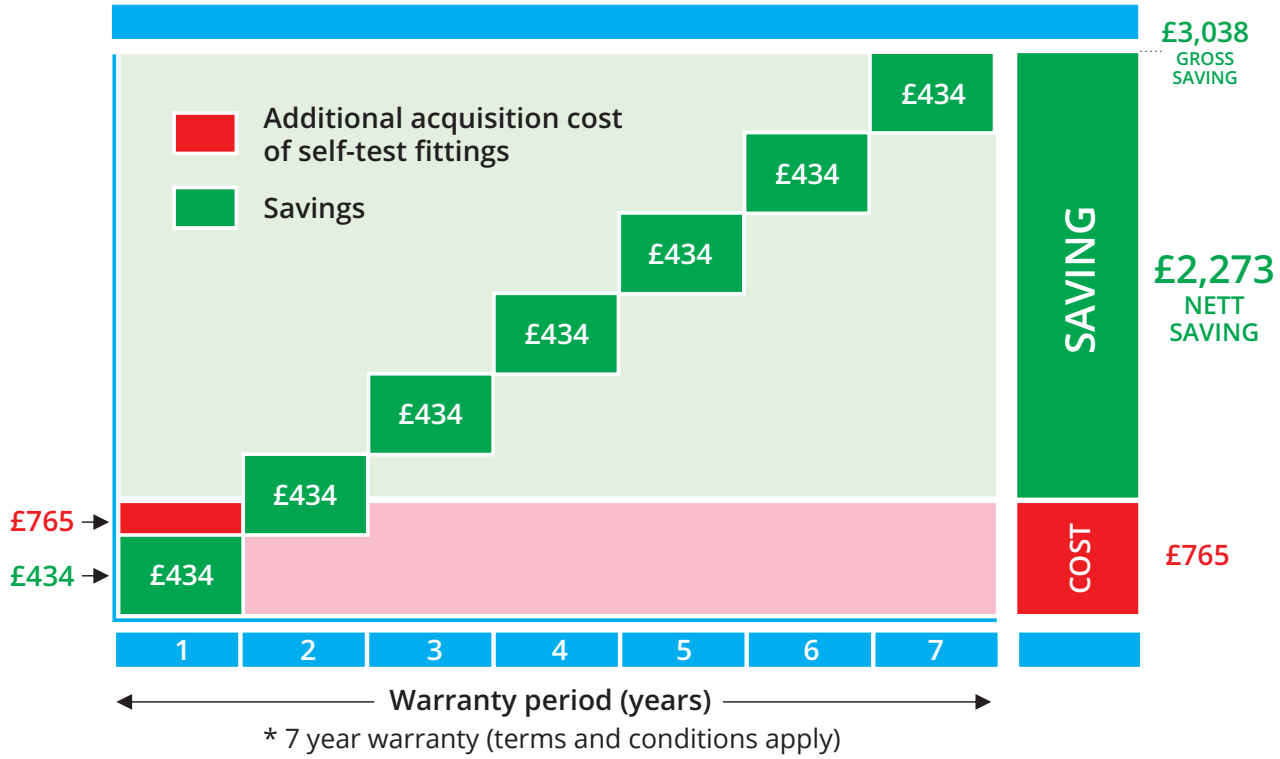
A light industrial unit with 54 manual-test emergency light fittings had this annual spend on testing:

MANUAL TESTING COSTS

1.5 hours @ £15/hour x 11 months =	**£247.50** per year
Annual test (subcontracted) =	**£186.50**
Total cost =	**£434** per year

SELF-TEST - THE PAYBACK

The additional cost (at trade price) of the same fittings in the self-test version =	**£765.00**
The payback, using self-test fittings rather than manual test, is therefore: **£765/£434** =	**1 year 9 months**



* 7 year warranty (terms and conditions apply)

With self-test and lithium batteries the cost savings keep adding-up – year after year

* 7 year warranty terms & conditions. The warranty covers the light fitting and the batteries. The warranty starts not from the date of manufacture or sale, but from the date of installation.

The complete product range

With our wide product range you can convert your entire emergency lighting installation to self-test and lithium.

		Manual test & lithium	Self-test & lithium	Addressable Self-test & lithium
OPEN AREA M3 LIGHTING	PANELS	✓	✓	✓
	SURFACE & SUSPENDED	✓	✓	✓
	AMENITY	✓	✓	✓
	DOWNLIGHTS	✓	✓	✓
	INDUSTRIAL	✓	✓	✓
DEDICATED NM3 OPEN AREA LIGHTING	BULKHEADS	✓	✓	✓
	CORRIDOR DOWNLIGHTS	✓	✓	✓
	TWINSPOTS	✓	✓	✓
EMERGENCY SIGNAGE	ISO7010	✓	✓	✓
	EURO SIGNS	✓	✓	✓

ICEL ENDORSED

Our dedicated emergency products are ICEL approved

LITHIUM

Why are lithium batteries important?

Lithium batteries are one of the biggest changes in emergency lighting for years:

1. They are a better battery than nickel cadmium (NiCd) for 4 reasons:

   - **Long lasting**. Lithium batteries last 8+ years and we warrant them for 7 years*.
   - **Safer**. Because lithium batteries last longer they are a safer way to guide people to an exit.
   - **More efficient**. Lithium batteries lose only 3% of their charge each month, compared with 20% for NiCd.
   - **Less waste**. Because lithium batteries last at least twice as long as NiCd there is 50% less waste.

2. Long life = better payback on self-test systems. With a warranted life of 7 years*, a self-test emergency lighting installation with lithium batteries can be expected to pay itself back 3½ times over.

*7 year warranty on lithium batteries across our whole range from January 2022 onwards

What are the warnings if an emergency fitting fails?

Manual test:

UNRELIABLE. NO LONGER CONSIDERED BEST-PRACTICE

If the permanent live supply is disconnected a green LED switches off – that's all!

- **No other failure is highlighted.**
- **No other warnings are given.**
- **No warnings are given that an end-user might notice.**

Self-test:

RELIABLE. BEST PRACTICE. AFFORDABLE

Battery, LED and permanent live faults ALL separately identified

- **Red and yellow flashing LEDs indicated different fault conditions.**
- **Audible buzzer augments the warning.**
- **Warnings are obvious so anyone can spot and report faults.**

Bluewater Shopping Centre

Bluewater shopping centre's car park and back of house lighting uses our GREENLAND self-test luminaires. In the words of the electrical manager, Warren Thornton, "This saves time and cost because we know our testing is timely and complete. Any issues are swiftly rectified."

Royal Albert Docks

NVC's emergency lighting solution for the Royal Albert Docks included 6,500 LED panels with lithium batteries and addressable self-testing functionality. The lithium batteries were chosen for their environmental sustainability and addressable self-test was chosen for performance and reliability over such a large site.

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