



Technology with Vision

# DuraLED<sup>®</sup>

by HELLA



## Lifetime Warranty

Road Transport & Safety LED Lighting now with Lifetime Warranty

# DuraLED®



## Lifetime Warranty

### 'Fit and Forget' LED Products now with Lifetime Warranty

From 1st September 2015 HELLA New Zealand offers a Lifetime Warranty for all automotive LED based lighting products that carry the DuraLED® brand.

From the very first DuraLED® designed in 1996 and field trialed in 1998, HELLA's radical pursuit to create a range of 'Fit and Forget', highly visible LED Marker and Signal Lamps, permanently lowered the cost of ownership for our fleets and made our roads safer. 'Fit & Forget' by Design is a HELLA no compromise philosophy and commitment to design for long-term durability and safety.

Products that carry the DuraLED® name are designed to outlast the life of the vehicle. Whilst keeping its design heritage and appearance the DuraLED® range has been continuously upgraded to the latest material and electronic component technology.

Note: Lifetime means the economic life of the vehicle these products were first installed on.

### Where Environmental Choice meets Economic Sense

In a world where the conservation of precious resources and the development of renewable energy sources are given prominence by scientists and decision makers, energy efficient LED lighting has a substantial role to play towards lowering the global carbon footprint without sacrificing functionality or compromising safety.



In addition to the conservation of energy, LED products can be designed to be long term durable. Much of this durability however depends on the component and material choices of the designer / manufacturer.

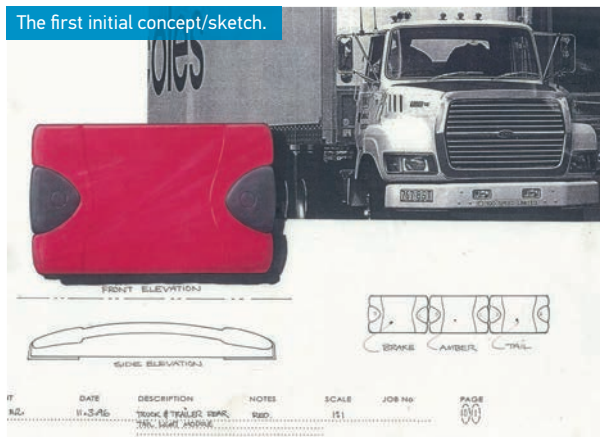
Due to global price pressures there is significant motivation for manufacturers to cut cost, using materials that fade or embrittle over time, using sealing systems than can fail over time or electronic components which are stressed to close to their limits. The HELLA designers of the DuraLED® range of products have made no such trade-offs. The DuraLED® range has been designed in all aspects, components, sealing systems and material choices to ensure a very long useful economic life.

[www.hella.co.nz](http://www.hella.co.nz)

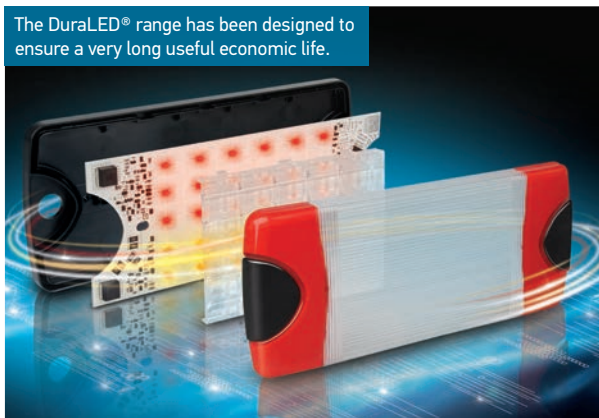
Martin Reinbach, Managing Director - Passionate about durable 'Fit and Forget' lighting.



The first initial concept/sketch.



The DuraLED® range has been designed to ensure a very long useful economic life.



## DuraLED® Goes the Distance

Ever since the first DuraLED® was field trialled in 1998, it has revolutionised the NZ transport industry. With no bulb failures to contend with, fleet operators all across New Zealand realised the potential of this game changer, substantially lowering the maintenance cost of their entire fleet.

HELLA's growing range of DuraLED® branded products, incorporating the latest LED technology, has proven to be the superior economic and environmental choice for transport operators across New Zealand. DuraLED® has a track record to last the distance. The first DuraLED® lamps were supplied in 1998 and are still in use today, 17 years later.

DuraLED® lamps offer distinctive designs with shallow shapes and concealed mounting screws for enhanced protection against damage.

Most DuraLED® marker and signal lamps are pre-wired with sheathed multi-core cable, fully sealed against dust and moisture to International Protection Standards IP 6K6 / IP 6K7, and compliant with current Australian Design Rules (ADR).

Once again following market feedback, HELLA now offers a range of selected DuraLED® Signal and Marker Lamps with moulded-in-Deutsch (DT) Connectors.

## Transport Operators Specify DuraLED®

HELLA's innovative DuraLED® lamps are designed for use on trucks, buses, caravans, emergency vehicles and speciality applications. The range includes marker lamps, direction indicators, end outline lamps, position lamps, high intensity warning signal lamps and a combination stop/rear position/indicator lamp range incorporating special ultra wide optics for enhanced visibility.

17 years after its first release the NZ made DuraLED® brand goes from strength to strength, proven to be the most popular lamps and found on hundreds of thousands of vehicles across the country and around the globe.

*We've always specified DuraLED®. And given lighting has never again come up in our fleet maintenance discussions over the years it's obviously been a wise choice.*

Neil Bell - National Freight Manager, Mainstream



## DuraLED® Product Timeline

1998



DuraLED® 36 LED

2000



DuraLED® Marker Lamp Series

2001



DuraLED® Combi Series

2003



DuraLED® Surface Mount Marker Series

2004



DuraLED® Multi-flash Signal Warning Lamp

2006



DuraLED® 24 LED Versions (Including Reverse)

2009



DuraLED® HD Side Marker - 50/30/20 LED Interior

2010



DuraLED® WL200 Work Lamp

2011



DuraLED® Combi with reverse and DT option

2013



DuraLED® Combi -R & S - Flush Mount Marker Series  
- WL750 Work Lamp

2014



DuraLED® DT Marker Series - WL550 - WL1300 Work Lamps

2015



DuraLED® Flush Mount Side Marker Lamp

# DuraLED® Technical Features

An overview of some of the unique technological features found in DuraLED® lamps.



## Grilamid® Lens Material

Grilamid® is a revolutionary optical grade Polyamide made in Switzerland. Grilamid® offers an unbeatable combination of properties including toughness against impact, long term UV stability and resistance to commonly used chemicals and washes. As such Grilamid® has become the specified material of choice for many of HELLA's valued commercial customers and end users.

## Long Term Transparency

Grilamid® will not lose its lustre or embrittle over time but will remain clear, transparent and impact tough for the life of the product. Grilamid® retains its superior optical performance without discolouration.

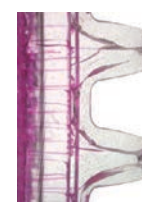
## Cleaning Products

The use of cleaning chemicals and even general liquid detergents is sometimes used as a reason to void warranties for products made from Polycarbonate. Such chemicals can cause crazing and/or cracking of this particular plastic type.

Grilamid® is highly resistant to chemicals commonly used in the transport industry, even in applications where it is regularly exposed to chemicals used to wash and sterilise equipment used in our Primary Industries. It is the ideal material for a true Fit and Forget performance.

## Grilamid® Retains its Toughness

LED truck and trailer lamps are frequently exposed to mechanical impacts by stones, tree branches and general shocks. Uncoated Polycarbonate will lose its impact resistance over time. Tests prove and market feedback confirms the superior strength and toughness of Grilamid® is not compromised even through the prolonged effects of weathering and UV exposure.



Stress cracked PC.



Grilamid® subjected to the same conditions.



## RFCommSafe™

Electromagnetic Compatibility (EMC) is an increasingly relevant safety concern for many emergency and industrial applications. As electronic devices such as LED lamps become more common, so does the risk of unintended electromagnetic interference (EMI) that can have adverse effects on other sensitive devices such as radios or communication equipment. It is essential that the circuitry of LED lamps does not cause harmful interference to other devices and at the same time is not susceptible to radiation from other devices.

RFCommSafe™ products were developed in recognition that some radio communication equipment can self-tune to be very sensitive in remote areas. In these situations the limits prescribed by regulatory requirements and as defined in international standards such as EN 55015, CISPR 15, CISPR 25 or relevant UNECE R10 Standards may not be sufficient to ensure there is no interference with very sensitive radio communication equipment.



## HCS - HELLA Compatibility Solution

Vehicles operating on New Zealand public roads require the direction indicator lamps to be monitored for correct function. When a 21 watt bulb based lamp is exchanged with an LED lamp, some flasher units will not recognise this LED lamp because of its low power consumption and indicate a bulb failure. Many transport fleets will operate trucks/trailers which can feature a mixture of bulb based direction indicator lamps and low power consumption LED direction indicator lamps.

In 1999 HELLA New Zealand designed the HELLA Compatibility Solution (HCS) to offer seamless compatibility between conventional bulb based lamps and HCS equipped LED lamps. The HCS control unit recognizes either a standard bulb lamp or an HCS LED lamp or a mixture thereof, and continues to work normally, without triggering the bulb failure warning function.

This technical solution has become the ISO Standard 13207-1 which is being incorporated into the body electronic of European Trucks. Astute fleet operators today specify LED lamps designed to ISO Standard 13207-1 to ensure the future-proofing of their fleet.

# HELLA New Zealand Warranty

## Standing behind our products

- All DuraLED® branded automotive LED based lighting products supplied by HELLA New Zealand carry a Lifetime Warranty covering faults in materials, components or workmanship.
- All other LED based lighting products carry a Five-Year Warranty.
- All other products carry a One-Year Warranty.

The LED based lighting products in this brochure were designed and manufactured in New Zealand. Ever since HELLA New Zealand started designing LED transport lighting in 1990 we have adopted a no compromise Fit and Forget - by Design philosophy. This philosophy as well as our dedication to on-going research and adoption of new technology ensures that our products continue to set the bench mark in performance, durability and reliability.

We strive for our products and services to always fully meet our customers' expectations. In the unlikely event that you should experience a confirmed warranty related problem with a HELLA product, our commitment to your satisfaction ensures that HELLA will, at our discretion, either repair or replace the product or refund the purchase price.

Warranty services may be obtained by returning the product within the warranty period to the HELLA Dealer where the product was originally purchased.

This warranty is in addition to and does not preclude any other rights or remedies available to the consumer under the Consumer Guarantees Act.

#### **This warranty does not cover:**

- Claim/s as a result of normal wear and tear, any modifications, alterations, non-compliance of assembly, service and operating instructions and/or any unfit or improper use.



**'Fit and Forget' LED Products now with Lifetime Warranty**



# DuraLED® Product Groups



**LED Stop/Rear Position Lamp with Night Light**  
P/N 2330 and variants



**LED Polycarbonate Stop/Rear Position Lamp with Night Light**  
P/N 2331 and variants



**LED Rear Direction Indicator Lamp**  
P/N 2151 and variants



**LED Polycarbonate Rear Direction Indicator Lamp**  
P/N 2152 and variants



**LED Reversing Lamp**  
P/N 1430 and variants



**LED Combi-R Stop/Rear Position/Rear Direction Indicator Lamp with Retro Reflector**  
P/N 2377 and variants



**LED Combi-S Stop/Rear Position/Rear Direction Indicator Lamp**  
P/N 2378 and variants



**LED Combi Stop/Rear Position/Rear Direction Indicator/Reversing Lamp**  
P/N 2380 and variants



**LED Combi Stop/Rear Position/Rear Direction Indicator Lamp**  
P/N 2381 and variants



**LED Combi-S 24V Stop/Rear Position/Rear Direction Indicator/Reversing Lamp**  
P/N 2383 and variants



**LED Side Marker Lamp**  
P/N 2053 and variants



**LED Front Position/End Outline Lamp**  
P/N 2054 and variants



**LED Front End Outline Lamp**  
P/N 2051 and variants



**LED Cab Marker/Supplementary Side Indicator Lamp**  
P/N 2026 and variants



**LED Rear Position/End Outline Lamp**  
P/N 2307 and variants



**LED Heavy-Duty Side Marker Lamp**  
P/N 2058 and variants



**LED Heavy Duty Front Position/End Outline Lamp**  
P/N 2061 and variants



**LED Heavy Duty Front End Outline Lamp**  
P/N 2062 and variants



**LED Heavy Duty Cab Marker/Supplementary Side Direction Indicator Lamp**  
P/N 2027 and variants



**LED Heavy Duty Rear Position/End Outline Lamp**  
P/N 2311 and variants



**LED Heavy Duty Side Marker Lamp with DT Connector**  
P/N 2073 and variants



**LED Heavy Duty Front Position/End Outline Lamp with DT Connector**  
P/N 2074 and variants



**LED Heavy Duty Front End Outline Lamp with DT Connector**  
P/N 2071 and variants



**LED Heavy Duty Cab Marker/Supplementary Side Direction Indicator Lamp with DT Connector**  
P/N 2076 and variants



**LED Heavy Duty Rear Position/End Outline Lamp with DT Connector**  
P/N 2312 and variants

# DuraLED® Product Groups



**LED Flush Mount Side Marker Lamp**

P/N 2083 and variants



**LED Flush Mount Front Position/End Outline Lamp**

P/N 2059 and variants



**LED Flush Mount Front End Outline Lamp**

P/N 2060 and variants



**LED Flush Mount Rear Position/End Outline Lamp**

P/N 2310 and variants



**LED Side Marker Lamp**

P/N 2033 and variants



**LED Supplementary Side Indicator Lamp**

P/N 2031 and variants



**LED Rear Position/End Outline Lamp**

P/N 2309 and variants



**LED 12 Interior Lamp**

P/N 959700XX and variants



**LED 12 Interior Lamp with Switch**

P/N 959704XX and variants



**LED Combi 50 Interior/Exterior Lamp**

P/N 980604XX and variants



**LED 36 - Interior/Exterior Lamp**

P/N 959037XX and variants



**LED 20 - Interior/Exterior Lamp**

P/N 980608XX and variants



**LED Work Lamp WL1300**

P/N 980740XX and variants



**LED Work Lamp WL750**

P/N 980950XX and variants



**LED Work Lamp WL550**

P/N 980573XX and variants



**LED Work Lamp WL200**

P/N 980670XX and variants



**LED Flush Mount Number Plate Insert**

P/N 2560 and variants



**LED Flush Mount Courtesy Lamp**

P/N 980855XX and variants



**LED Surface Mount Courtesy Lamp**

P/N 959630XX and variants



**LED Multi-flash Signal Warning Lamp**

P/N 959037XX and variants



**LED Safety DayLights™**

P/N 1003

For more technical information on all these DuraLED® products please visit [www.hella.co.nz](http://www.hella.co.nz)

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