

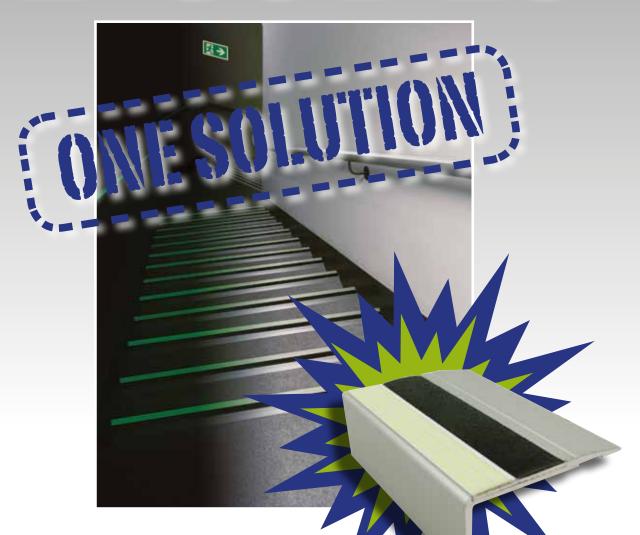


Emergency Signs and Escape Routes

Solutions to meet NZBC Clause F8 Signs and Clause F6 Visibility in Escape Routes

New Zealand Catalogue 2013

2 CODES



Attention Designers

Ecoglo has the solution for both safety step nosing and emergency lighting with the one quality product.

Satisfy both NZBC D1 and F6 codes with Ecoglo Step Nosing and save your client costs.

Retrofit options are available for many 3rd party nosing profiles.



D1.3.3. (g) Have stair treads that can be easily seen **F6.2** Specified features must be reasonably visible by a lighting system, other systems or both, during the failure of the main lighting.



F4-171 Step Nosing, anodised 20 microns

VISIBLY BETTER

Ecoglo International Limited

77 Kingsley St, Christchurch Phone: +64 3 348 3781 Email: info@ecoglo.com WWW.ecoglo.co.nz

Contents



Contents	Page
Completed Ecoglo Projects	2
Company Profile	3
Brand Ambassador	3
Emergency Exit Signs	4
Ecoglo Exit Signs FAQ's	5
Ecoglo Sign Compliance Questions	6,7
F8/AS1 Compliance Checklist	8
Ecoglo Escape Route Products	9,10
F6 Alternative Solutions	11,12
Ecoglo Product Data Sheets	13-27
Material Data Sheets	28-31

1

Completed Projects Using Ecoglo Products

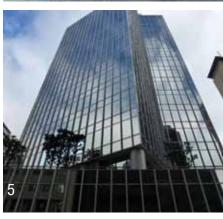








- 1. Christchurch Hospital
- 2. Bond Street Underground Station, London
- 3. Burj Khalifa, Dubai
- 4. Venetian Macao, Macau
- 5. ANZ Tower, Wellington
- 6. Yueng Long MTR Station, Hong Kong
- 7. Wellington Regional Hospital
- 8. MCG, Melbourne











Ecoglo International Limited

PO Box 7698, Sydenham 8240 77 Kingsley Street, Sydenham 8023 Christchurch, New Zealand

> Phone: 03 348 3781 Fax: 03 343 6821 Email: info@ecoglo.com

Company Profile



Ecoglo International is a New Zealand owned company with it's head office and manufacturing plant located in Christchurch.

When Ecoglo was formed in 1997 it focused on a gap in market for lighting solutions that used minimal or no electricity. Ecoglo's research had looked at visibility in emergency conditions and crowd behaviour before getting its first opportunity with the Sydney Olympic arena.

The Sydney Olympics were the first Olympics to actively integrate sustainable building solutions into it's facilities and Ecoglo was able to develop an aisle lighting system for the arena.

Since 2000 research and development has focused on refining Ecoglo's patented manufacturing process to produce products that have superior durability, rapid charging and predictable visibility. This development programme has lead to the design and manufacture of a range of Emergency Signs and Escape Route Products to meet New Zealand Building Code Clause F8 Signs and Clause F6 Visibility in Escape Routes.

In New Zealand Ecoglo can be seen at Canterbury University, ANZ Tower (Wellington), ASB Headquarters, Downtown Car Park (Auckland), Christchurch and Wellington Hospitals, Eden Park, St James Theatre as well as hundreds of warehouses, educational and public facilities, offices and health care buildings.

Ecoglo's products have been used worldwide in facilities as varied as the Melbourne Cricket Ground, New York's 'Jazz at the Lincoln Center, Singapore Supreme Court, Toronto's Eaton Centre, London's Bond St Underground Station and Dubai's 160 floor Burj Khalifa.

By harvesting sunlight or recycling the existing light in a building, Ecoglo products provide sustainable and cost effective building solutions. The solutions are failsafe, operate immediately and do not require ongoing maintenance.

Ecoglo's green credentials were confirmed by being specified in the 'Living Building Challenge' to become part of Tuhoe's new headquarters - Te Wharehou o Tuhoe.

There are many ways to become more environmentally friendly and one of these is to endeavour, wherever possible, to use new technology products that are more sustainable.

As well as reducing electricity usage, Ecoglo products incorporate recycled aluminium, are non toxic and non radioactive. Being very durable they will last the life of the facility and can then be readily recycled.

Brand Ambassador

Ecoglo Brand Ambassador - Sir Richard Hadlee

Sir Richard's deeds on the cricket field are well known. He was the first player to take 400 test wickets; his best bowling performance was 9 for 52 against Australia at the Gabba in 1985; and he scored over 3000 test runs including 2 centuries. That's why Wisden ranked him as one of the 10 greatest cricketers of the 20th century.

As a player Sir Richard was totally committed to excellence and high performance - the consummate professional, analytical and disciplined, striving at every opportunity to be the best in the game.

He earned the respect of the cricketing world wherever he displayed his skills.

Here at Ecoglo we share the same values that made Sir Richard such a dominant global player.

Our team is proud to be associated with Sir Richard as we aspire to be the very best in our field.



Emergency Exit Signs to meet F8/AS1

Face Mounted



Pictogram

Exit straight on from here 16 metre maximum viewing distance RM1616-16m 160mm x 160mm



Pictogram Exit straight on from here 24 metre maximum viewing distance

RM2222-24m 225mm x 225mm



Emergency Exit Use this door only to exit in an emergency

16 metre maximum viewing distance EE6128-16m 610mm x 280mm



Pictogram Right

Exit to right from here
16 metre maximum viewing distance
RMR2916-16m 290mm x 160mm



Pictogram Right Exit to right from here

24 metre maximum viewing distance RMR4222-24m 420mm x 225mm



Emergency Exit Use this door only to exit in an emergency

24 metre maximum viewing distance EE7835-24m 785mm x 350mm



Pictogram Left

Exit to left from here 16 metre maximum viewing distance RML2916-16m 290mm x 160mm



Pictogram Left Exit to left from here

24 metre maximum viewing distance RML4222-24m 420mm x 225mm



No Exit Do not use this door to exit in an emergency

16 metre maximum viewing distance NE4113-16m 410mm x 133mm



Exit Exit straight on from here 16 metre maximum viewing distance EX2313-16m 230mm x 133mm



Exit Exit straight on from here 24 metre maximum viewing distance EX2816-24m 285mm x 162mm



Arrow Not specified in F8/AS1 16 metre maximum viewing distance AR1616-16m 160mm x 160mm



Arrow Not specified in F8/AS1 24 metre maximum viewing distance AR2222-24m 225mm x 225mm





Ecoglo International Limited

77 Kingsley St, Christchurch Phone: +64 3 348 3781 Email: info@ecoglo.com WWW.ecoglo.co.nz

Ecoglo Exit Signs FAQ's



Q How much do they cost?

A Most commonly less than \$50+GST trade price, but signs that need to be seen from more than 16 metres cost more, and if brackets are required to mount the signs from a ceiling, or sticking out from a wall, the cost is an extra \$15.

Q Do they need an electrical light installed near them?

A No, they are designed to make use of the existing light in the building.

Q How long do they last?

A minimum of 30 years when installed indoors before there would be any measurable change in performance.

• What maintenance is required?

A Make sure they are cleaned of dust or dirt build up. If the building doesn't need any other emergency lighting, in many cases Ecoglo exit signs will not need to be part of the annual building WOF schedule

• F8/AS1 requires that they be illuminated with a minimum of 100 lux to make sure they are charged ready for an emergency. What if there isn't 100lux where the sign needs to be?

A Ecoglo signs are designed to work in most normal lighting situations. Ecoglo's professional engineer can design an alternative solution to meet F8 in many situations where there is 55 lux available, and in some situations where there is as little as 5 lux available (note that G8 requires a minimum illumination of 20 lux on the floor in occupied spaces). For a simple building layout, the cost of getting Ecoglo to design a solution and generate the documents for consent is usually less than \$200

Q Do the lights near the exit signs need to be turned on before the building is occupied?

A No. Ecoglo exit signs have been independently tested to confirm they meet the F8/AS1 luminance (brightness) requirement for Risk Group C buildings after only 5 minutes charging at 100 lux.

• What happens if there is a lights-out emergency in the first 5 minutes of occupation?

A In most cases a sign will have some residual charge from when there was light on it before, but even if the sign has become fully dis charged and someone enters a dark space and turns on a light, the signs will meet the F8/AS1 brightness requirement for a longer evacuation time than the time since the light was turned on. By the time 5 minutes has elapsed the signs will have the full 30 minutes charge required for Risk Group C buildings 1.

Q How reliable are they?

A They have no moving parts or components that will need replacing. As long as they are installed where there are normal indoor light levels, and they are kept reasonably clean, and not physically damaged, they will be visible in an emergency for the time required by F8 and F6 for at least 30 years.

Q Where are they made?

A They are designed and manufactured in Christchurch, using a unique process that was developed locally, over ten years ago.

Q Where can they be used?

A Ideal places are in building spaces that are normally occupied when the signs may need to be used, such as classrooms, offices, meeting rooms, retail spaces, factories, and warehouses. In these places if the space becomes dark, the occupier will turn on a light, making sure that the signs remain well charged. Ecoglo Exit signs can also be used in spaces that aren't normally occupied (such as corridors, linking rooms and stairwells), but there needs to be a management process for making sure that the signs are always sufficiently charged when someone may need to use them. Contact Ecoglo for more details.

Who can install them?

A Anyone who knows how to put a screw into a wall, and knows where the exit signs need to be installed to meet F8.

What are their environmental credentials?

A They are made in New Zealand in a factory that uses electricity (from a supplier committed to sustainable electricity production) as its only energy source. The factory creates no commercial liquid effluent, and negligible air emissions. The signs have no replaceable parts which would need to be disposed of, and no cadmium or mercury. They normally don't require any electricity to be used to keep them charged. They have an extremely long life, and if for any reason they need to be disposed of, they can be included with other aluminium products for aluminium recycling.

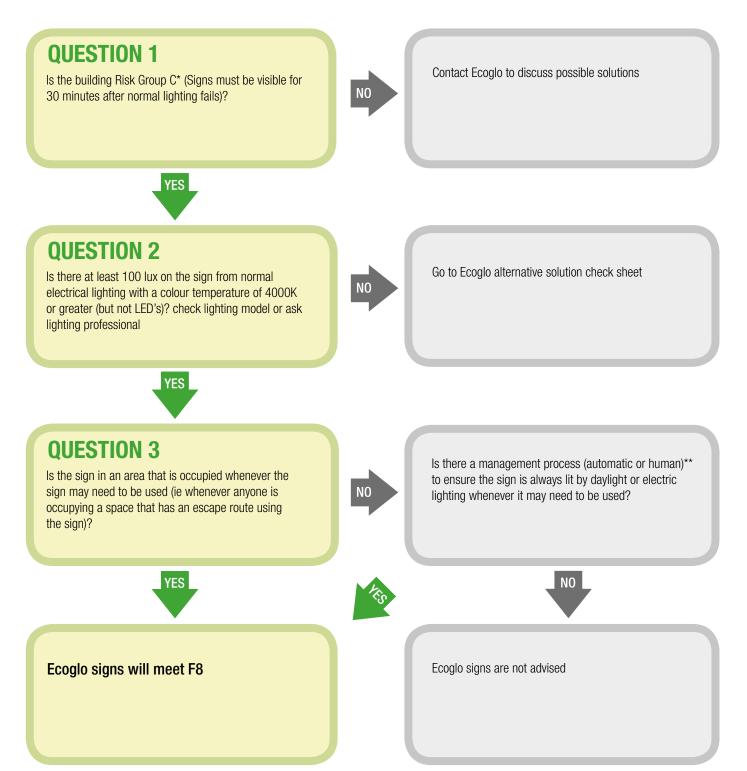
Q Can they be used outdoors?

A Yes, they are designed to meet the rigours of long term outdoor exposure in our harsh Southern Hemisphere environment. No matter what the weather, they will meet the requirements of F8 for several hours after sunset. Contact Ecoglo for specific details.

¹ Almost all buildings with less than 1000 occupants are Risk Group C



How to check if an Ecoglo sign will meet F8/AS1



* NZBC F6 defination for Risk Group C: a building with an evacuation time of less than 30 minutes, an occupant load no more than 1000, and whose occupants are not to remain in the building during an emergency.

** Effective management processes include:

- 1. Daylight is >100 lux and the sign will not be used later than 2.5 hours after sunset.
- 2. Lights will be switched on manually by people occupying a space that may need to use the sign: Warning signs will be placed by the light switches.
- 3. Timer and/or smart sensor circuitry ensures 200 lux for 30 minutes every 2 hours or 100 lux for 10 minutes followed by reduced light levels that never drop below 10 lux while the building is occupied.
- 4. Circuits link lighting so that when lights are switched on in an occupied space all signs in all escape paths from the occupied space are lit.

F8 Alternative Solution



How to check if an Ecoglo sign will meet F8 with an Alternative Solution

QUESTION 1

Is the building Risk Group C* (Signs must be visible for 30 minutes after normal lighting fails)?



Contact Ecoglo to discuss possible solutions



QUESTION 2

Is there at least 55 lux on the sign from normal electrical lighting (check lighting model or ask lighting professional)?



Contact Ecoglo to discuss possible solutions



QUESTION 3

Is the sign in an area that is occupied whenever the sign may need to be used (ie whenever anyone is occupying a space that has an escape route using the sign)?



Is there a management process (automatic or human)** to ensure the sign is always lit by daylight or electric lighting whenever it may need to be used?







Ecoglo signs will meet F8.

Send plans showing location of exit signs and details of charging lighting to Ecoglo.

Specify that Ecoglo supplies alternative solution documentation.

Ecoglo signs are not advised

* NZBC F6 defination for Risk Group C: a building with an evacuation time of less than 30 minutes, an occupant load no more than 1000, and whose occupants are not to remain in the building during an emergency.

** Effective management processes include:

- 1. Daylight is >55 lux and the sign will not be used later than 2.5 hours after sunset.
- 2. Lights will be switched on manually by people occupying a space that may need to use the sign: Warning signs will be placed by the light switches.
- 3. Timer and/or smart sensor circuitry ensures 200 lux for 30 minutes every 2 hours or 55 lux for 10 minutes followed by reduced light levels that never drop below 5 lux while the building is occupied.
- 4. Circuits link lighting so that when lights are switched on in an occupied space all signs in all escape paths from the occupied space are lit.
- 5. Signs are outdoors and required viewing distance is 50% of the signs rating.

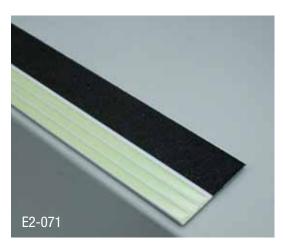
F8/AS1 Compliance Checklist



Ecoglo signs meet the requirements of F8/AS1 because:

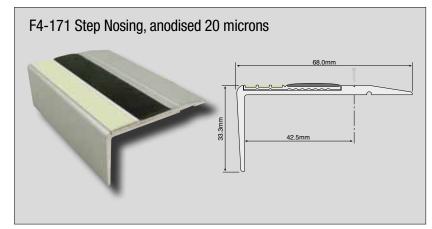
	The building is classified as RISK Group \mathbb{C}^* (requiring the signs to remain vi	visible for 30 minutes after normal lighting falls).	
	There is at least 100 lux on every sign from normal electrical lighting with	a colour temperature of 4000K or greater (but not LEDs)	۱.
	Yes - Every sign is in an area that is occupied whenever the sign may need	d to be used	
	Or No - but: The following management processes are used to ensure ever electric lighting whenever it may need to be used:	ry sign is sufficiently charged by daylight and/or normal	
	Daylighting is at least 100 lux and the sign will not be used before daylight or lat	ater than 2.5 hours after sunset.	
	Lights will be switched on manually by people occupying a space that may need	d to use the sign: warning will be placed by the light switches.	
	Timer circuitry ensures 200 lux for 30 minutes every 2.5 hours while the building	ng is occupied.	
	Smart sensor circuitry ensures 100 lux for 10 minutes followed by reduced light	It levels that never drop below 10 lux while the building is occupie	d.
	Circuits link lighting so that when lights are switched on in an occupied space all	all signs in all escape paths from the occupied space are lit.	
The p	plan, titled	(attached) shows	
	The lighting model maintained lux levels,		
	or - The lux readings taken from a light meter on site		
The p	plan, titled	(attached) shows	
	The location of each sign, its Ecoglo product code and if applicable, the manager	ement process used to ensure the sign will be sufficiently charged	
	Product data sheets and installation instructions can be found on the Ecoglo web	ebsite www.ecoglo.co.nz	
The d	document, titled F8 AS1 luminance report. pdf	(attached) confirms	
	That the Ecoglo signs specified on the plan will meet the F8/AS1 requirement of	f 30mcd/m2 for at least 30 minutes.	
	The following maintenance inspections will be carried out:		
			
6 N	Monthly Maintenance Check (to be carried out by the Owne	ner or their appointed agent) COMPLETED 🗹	
	All signs are still configured as at installation and there is no material damage to	to any of the signs.	
	All signs are clean from general dust build up and any other specific obscuring of	deposits.	
	All signs are clearly visible and have not been covered up.		
	All lights checked that the positions have not altered from design.		
	All lights are in working order and clean.		
Anı	nnual Inspection (to be carried out an IQP) COMPLETED		
	All signs are still configured as at installation and there is no material damage to	to any of the signs.	
	All signs are clean from general dust build up and any other specific obscuring of	deposits.	
	All signs are clearly visible and have not been covered up.		
	All lights checked that the positions have not altered from design.		
	All lights are in working order and clean.		
	Charging management processes (if specified above) are fully operational.		

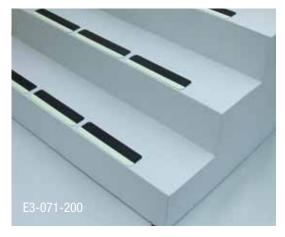
Escape Route Products to meet F6 Visibility in Escape Routes

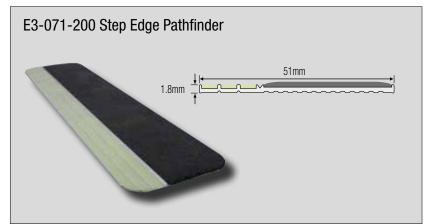




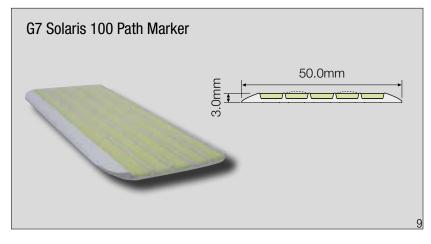




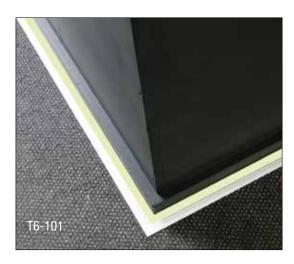


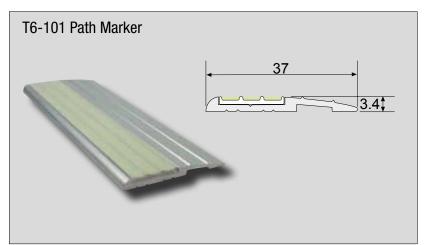




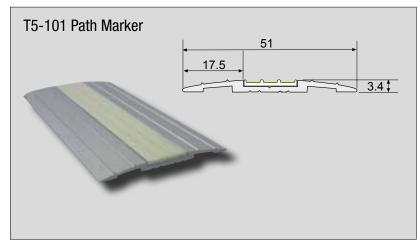


Emergency Escape Route Products

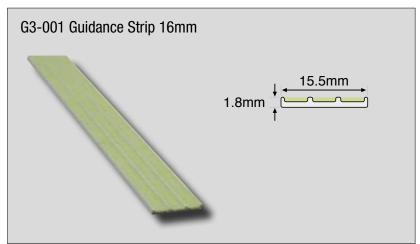




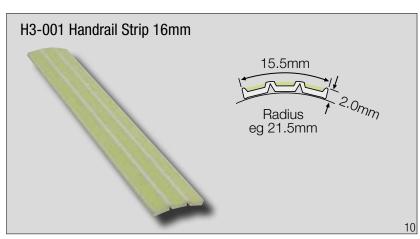










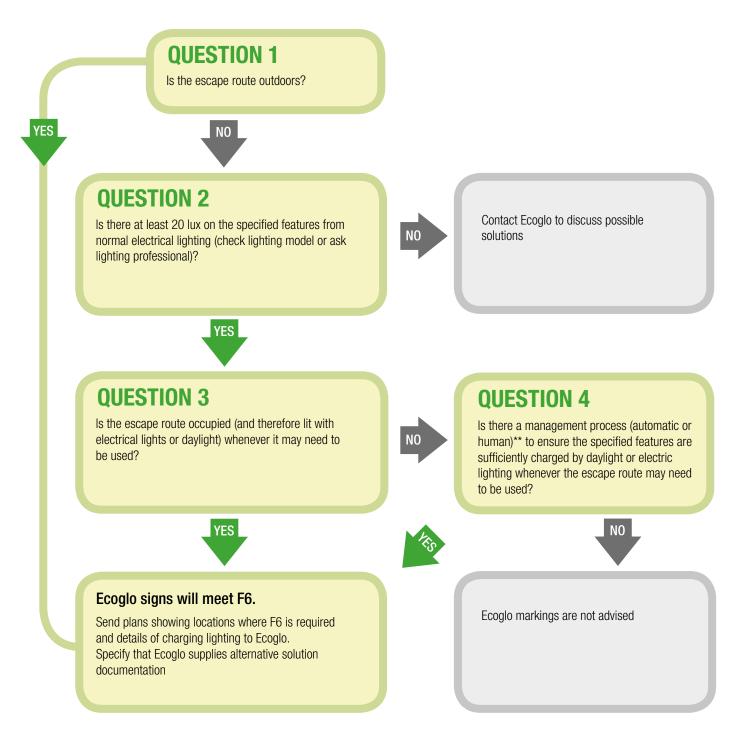


F6 Alternative Solution Risk Group C Buildings*



How to check if Ecoglo photoluminescent markings will meet F6 with an alternative solution

F6 requires 'specified features' to be made visible. Specified features include: Stairs and ramps, escape doors, handrails, changes in direction and obstructions. See the most recent Ecoglo F6 PL Solution document at www.ecoglo.co.nz for more details.



^{*} NZBC F6 defination for Risk Group C: a building with an evacuation time of less than 30 minutes, an occupant load no more than 1000, and whose occupants are not to remain in the building during an emergency.

** Effective management processes include:

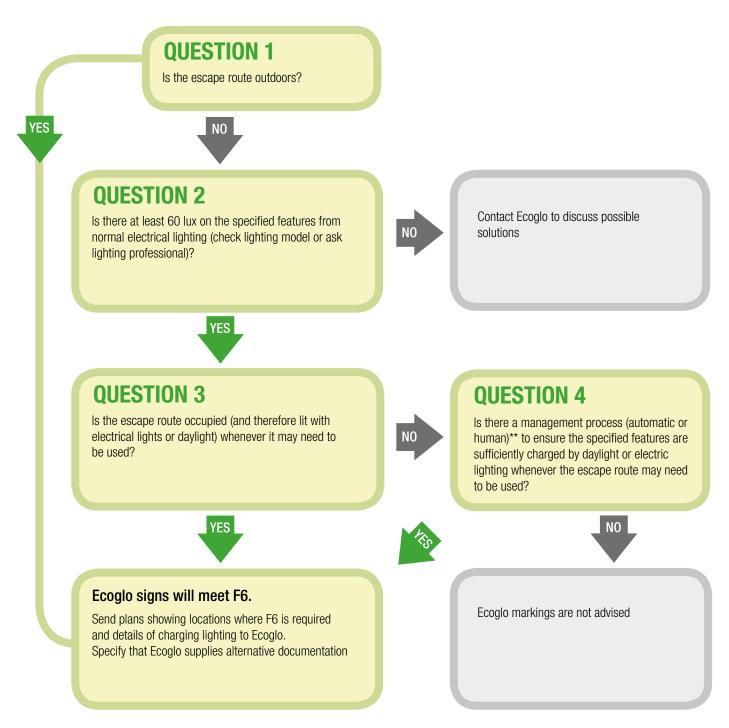
- 1. Daylighting is >20 lux and the escape route will not be used later than 2.5 hours after sunset.
- 2. Lights will be switched on manually by people occupying a space that may need to use the sign: Warning signs will be placed by the light switches.
- 3. Timer and/or smart sensor circuitry ensures 150 lux for 10 minutes every 2 hours or 20 lux for 10 minutes followed by reduced light levels that never drop below 5 lux while the building is occupied.
- 4. Circuits link lighting so that when lights are switched on in an occupied space all signs in all escape paths from the occupied space are lit.

F6 Alternative Solution Risk Group B Buildings*



How to check if Ecoglo photoluminescent markings will meet F6 with an alternative solution

F6 requires 'specified features' to be made visible. Specified features include: Stairs and ramps, escape doors, handrails, changes in direction and obstructions. See the most recent Ecoglo F6 PL Solution document at www.ecoglo.co.nz for more details.



^{*} NZBC F6 defination for Risk Group B: a building whose occupants are not required to remain in the building during an emergency, and (a building with an evacuation time between 30 minutes and 90 minutes, or a building with an occupant load over 1000).

** Effective management processes include:

- 1. Daylighting is >20 lux and the escape route will not be used later than 2.5 hours after sunset.
- 2. Lights will be switched on manually by people occupying a space that may need to use the escape route: Warning signs will be placed by the light switches.
- 3. Timer and/or smart sensor circuitry ensures 150 lux for 10 minutes every 2 hours or 60 lux for 10 minutes followed by reduced light levels that never drop below 5 lux while the building is occupied.
- 4. Circuits link lighting so that when lights are switched on in an occupied space all signs in all escape paths from the occupied space are lit.

Product Data Sheet - Pictogram RM





Ecoglo "Pictogram" Signs are designed to be used in and about buildings to identify escape routes to meet NZBC Clause F8 "Signs". The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SIGN DEFINITION

Exit straight on from here.

COMPLIANCE

Ecoglo "Pictogram" signs can be used to meet F8/AS1, as detailed below, or can be used in alternative solutions. Phone Ecoglo or email EngineeredSolutions@ecoglo.com for design advice for alternative solutions.

PERFORMANCE

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 100 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 30 minutes after failure of the main lighting.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 350 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 90 minutes after failure of the main lighting.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The products are available in 2 sizes - maximum viewing distance 16 metres and maximum viewing distance 24 metres.

PRODUCT CODE	PRODUCT NAME	SIGN DEFINITION	SIGN SIZE	MAXIMUM VIEWING DISTANCE
RM1616-16m	Pictogram	Exit straight on from here	160mm x 160mm	16 metres
RM2222-24m	Pictogram	Exit straight on from here	225mm x 225mm	24 metres

COMPOSITION

The high visibility flat panel is manufactured from 5005 0.9mm aluminium sheet. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active ingredients onto the aluminium sheet following curing at high temperature.

INSTALLATION

The standard sign is supplied with fixers for mounting flat on a wall. Mounting brackets are available for ceiling and wall fixing. Mounting brackets take one sign or two signs back to back.

PRODUCT CODE	PRODUCT NAME	CEILING MOUNT BRACKET	WALL MOUNT BRACKET
RM1616-16m	Pictogram	B1-160	B1-160
RM2222-24m	Pictogram	B1-225	B1-160

Contact

Ecoglo International Limited

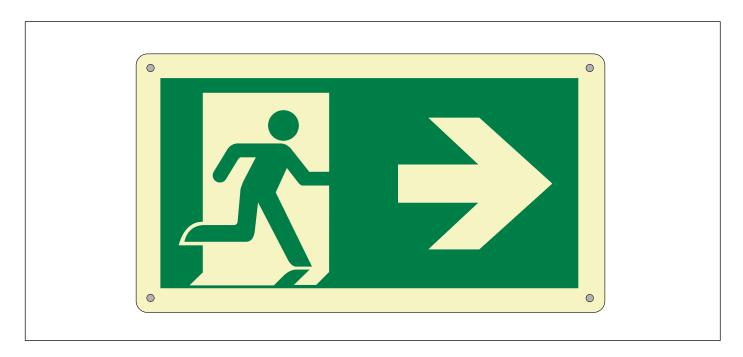
77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Pictogram Right RMR





Ecoglo "Pictogram Right" Signs are designed to be used in and about buildings to identify escape routes to meet NZBC Clause F8 "Signs". The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SIGN DEFINITION

Exit right from here.

COMPLIANCE

Ecoglo "Pictogram Right" signs can be used to meet F8/AS1, as detailed below, or can be used in alternative solutions. Phone Ecoglo or email EngineeredSolutions@ecoglo.com for design advice for alternative solutions.

PERFORMANCE

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 100 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 30 minutes after failure of the main lighting.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 350 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 90 minutes after failure of the main lighting.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: $<\!10\%$

SUPPLY

The products are available in 2 sizes - maximum viewing distance 16 metres and maximum viewing distance 24 metres.

PRODUCT CODE	PRODUCT NAME	SIGN DEFINITION	SIGN SIZE	MAXIMUM VIEWING DISTANCE
RMR2916-16m	Pictogram Right	Exit to right from here	290mm x 160mm	16 metres
RMR4222-24m	Pictogram Right	Exit to right from here	420mm x 225mm	24 metres

COMPOSITION

The high visibility flat panel is manufactured from 5005 0-9mm aluminium sheet. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active ingredients onto the aluminium sheet following curing at high temperature.

INSTALLATION

The standard sign is supplied with fixers for mounting flat on a wall. Mounting brackets are available for ceiling and wall fixing. Mounting brackets take one sign or two signs back to back.

PRODUCT CODE	PRODUCT NAME	CEILING MOUNT BRACKET	WALL MOUNT BRACKET
RMR2916-16m	Pictogram Right	B1-290	B1-160
RMR4222-24m	Pictogram Right	B1-420	B1-225

Contact

Ecoglo International Limited

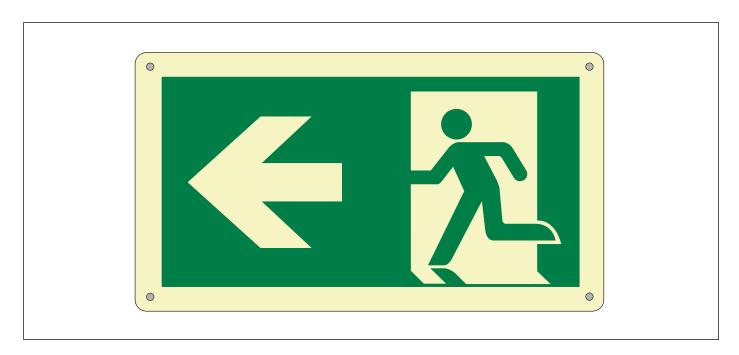
77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Pictogram Left RML





Ecoglo "Pictogram Left" Signs are designed to be used in and about buildings to identify escape routes to meet NZBC Clause F8 "Signs". The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SIGN DEFINITION

Exit left from here.

COMPLIANCE

Ecoglo "Pictogram Left" signs can be used to meet F8/AS1, as detailed below, or can be used in alternative solutions. Phone Ecoglo or email EngineeredSolutions@ecoglo.com for design advice for alternative solutions.

PERFORMANCE

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 100 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 30 minutes after failure of the main lighting.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 350 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 90 minutes after failure of the main lighting.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The products are available in 2 sizes - maximum viewing distance 16 metres and maximum viewing distance 24 metres.

	PRODUCT CODE	PRODUCT NAME	SIGN DEFINITION	SIGN SIZE	MAXIMUM VIEWING DISTANCE
	RML2916-16m	Pictogram Right	Exit to right from here	290mm x 160mm	16 metres
I	RML4222-24m	Pictogram Right	Exit to right from here	420mm x 225mm	24 metres

COMPOSITION

The high visibility flat panel is manufactured from 5005 0.9mm aluminium sheet. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active ingredients onto the aluminium sheet following curing at high temperature.

INSTALLATION

The standard sign is supplied with fixers for mounting flat on a wall. Mounting brackets are available for ceiling and wall fixing. Mounting brackets take one sign or two signs back to back.

PRODUCT CODE	PRODUCT NAME	CEILING MOUNT BRACKET	WALL MOUNT BRACKET
RML2916-16m	Pictogram Left	B1-290	B1-160
RML4222-24m	Pictogram Left	B1-420	B1-225

Contact

Ecoglo International Limited

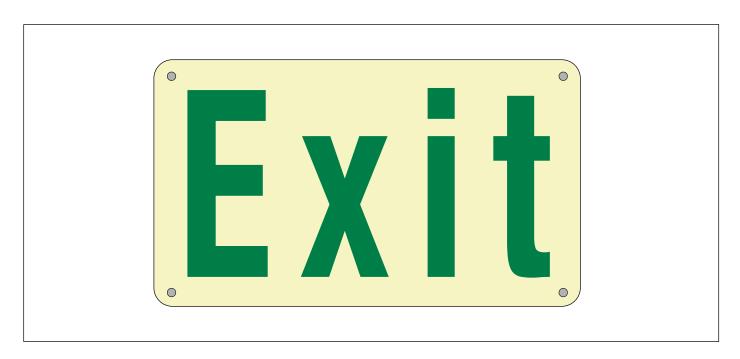
77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Exit EX





Ecoglo "Exit" Signs are designed to be used in and about buildings to identify escape routes to meet NZBC Clause F8 "Signs". The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SIGN DEFINITION

Exit straight on from here.

COMPLIANCE

Ecoglo "Exit" signs can be used to meet F8/AS1, as detailed below, or can be used in alternative solutions. Phone Ecoglo or email EngineeredSolutions@ecoglo.com for design advice for alternative solutions.

PERFORMANCE

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 100 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 30 minutes after failure of the main lighting.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 350 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 90 minutes after failure of the main lighting.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The products are available in 2 sizes - maximum viewing distance 16 metres and maximum viewing distance 24 metres.

PRODUCT CODE	PRODUCT NAME	SIGN DEFINITION	SIGN SIZE	MAXIMUM VIEWING DISTANCE
EX2313-16m	Exit	Exit straight on from here	230mm x 133mm	16 metres
EX2816-24m	Exit	Exit straight on from here	285mm x 162mm	24 metres

COMPOSITION

The high visibility flat panel is manufactured from 5005 0.9mm aluminium sheet. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active ingredients onto the aluminium sheet following curing at high temperature.

INSTALLATION

The standard sign is supplied with fixers for mounting flat on a wall. Mounting brackets are available for ceiling and wall fixing. Mounting brackets take one sign or two signs back to back.

	PRODUCT NAME	CEILING MOUNT BRACKET	WALL MOUNT BRACKET
EX2313-16m	Exit	B1-230	B1-133
EX2816-24m	Exit	B1-285	B1-162

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Emergency Exit EE





Ecoglo "Emergency Exit" Signs are designed to be used in and about buildings to identify escape routes to meet NZBC Clause F8, "Signs". The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SIGN DEFINITION

Use this door only to exit in an emergency.

COMPLIANCE

Ecoglo "Emergency Exit" signs can be used to meet F8/AS1, as detailed below, or can be used in alternative solutions. Phone Ecoglo or email EngineeredSolutions@ecoglo.com for design advice for alternative solutions.

PERFORMANCE

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 100 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 30 minutes after failure of the main lighting.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 350 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 90 minutes after failure of the main lighting.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The products are available in 2 sizes - maximum viewing distance 16 metres and maximum viewing distance 24 metres.

PRODUCT CODE	PRODUCT NAME	SIGN DEFINITION		MAXIMUM VIEWING DISTANCE
EE6128-16m	Emergency Exit	Use this door only to exit in an emergency	610mm x 280mm	16 metres
EE7835-24m	Emergency Exit	Use this door only to exit in an emergency	785mm x 350mm	24 metres

COMPOSITION

The high visibility flat panel is manufactured from 5005 0.9mm aluminium sheet. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active

ingredients onto the aluminium sheet following curing at high temperature.

INSTALLATION

The standard sign is supplied with fixers for mounting flat on a wall. Mounting brackets are available for ceiling and wall fixing.

PRODUCT CODE	PRODUCT NAME	CEILING MOUNT BRACKET	WALL MOUNT BRACKET
EE6128-16m	Emergency Exit	B1-610	B1-280
EE7835-24m	Emergency Exit	B1-785	B1-350

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - No Exit NE





Ecoglo "No Exit" Signs are designed to be used in and about buildings to identify escape routes to meet NZBC Clause F8 "Signs".

The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SIGN DEFINITION

Do not use this door to exit in an emergency.

COMPLIANCE

Ecoglo "No Exit" signs can be used to meet F8/AS1, as detailed below, or can be used in alternative solutions. Phone Ecoglo or email EngineeredSolutions@ecoglo.com for design advice for alternative solutions.

PERFORMANCE

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 100 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 30 minutes after failure of the main lighting.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 350 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 90 minutes after failure of the main lighting.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The "No Exit" sign is available in 1 size with a maximum viewing distance of 16 metres.

PRODUCT CODE	PRODUCT NAME	SIGN DEFINITION	SIGN SIZE	MAXIMUM VIEWING DISTANCE
NE4113-16m	No Exit	Do not use this door to exit in an emergency	410mm x 133mm	16 metres

COMPOSITION

The high visibility flat panel is manufactured from 5005 0.9mm aluminium sheet. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active ingredients onto the aluminium sheet following curing at high temperature.

INSTALLATION

The standard sign is supplied with fixers for mounting flat on a wall. Mounting brackets are available for ceiling and wall fixing.

PRODUCT CODE	PRODUCT NAME	CEILING MOUNT BRACKET	WALL MOUNT BRACKET	
NE4113-16m	No Exit	B1-410	B1-133	

Contact

Ecoglo International Limited

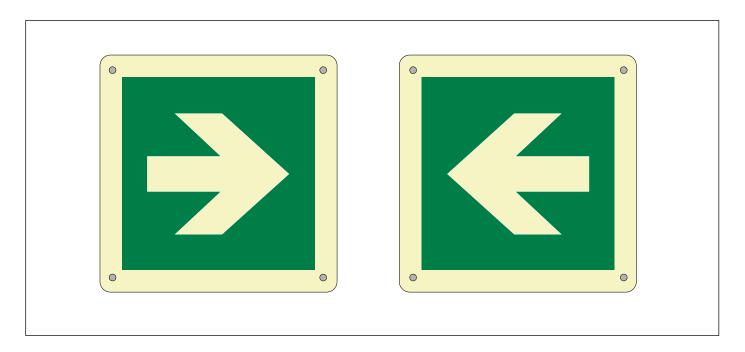
77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Arrow AR





Ecoglo "Arrow" Signs are designed to be used in and about buildings to identify escape routes to meet NZBC Clause F8 "Signs". The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SIGN DEFINITION

No specified definition in F8/AS1.

COMPLIANCE

Ecoglo "Arrow" signs can be used in F8 Alternative Solutions as detailed below. Phone Ecoglo or email EngineeredSolutions@ ecoglo.com for design advice for alternative solutions.

PERFORMANCE

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 100 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 30 minutes after failure of the main lighting.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 350 lux continuously during occupancy will ensure minimum luminance of 30 mcd for 90 minutes after failure of the main lighting.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: $<\!10\%$

SUPPLY

The products are available in 2 sizes - maximum viewing distance 16 metres and maximum viewing distance 24 metres.

PRODUCT CODE	PRODUCT NAME	SIGN DEFINITION	SIGN SIZE	MAXIMUM VIEWING DISTANCE
AR1616-16m	Arrow	Not specified in F8/AS1	160mm x 160mm	16 metres
AR2222-24m	Arrow	Not specified in F8/AS1	225mm x 225mm	24 metres

COMPOSITION

The high visibility flat panel is manufactured from 5005 0.9mm aluminium sheet. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active ingredients onto the aluminium sheet following curing at high temperature.

INSTALLATION

The standard sign is supplied with fixers for mounting flat on a wall. Mounting brackets are available for ceiling and wall fixing.

PRODUCT CODE	PRODUCT NAME	CEILING MOUNT BRACKET	WALL MOUNT BRACKET
AR1616-16m	Arrow	B1-160	B1-160
AR2222-24m	Arrow	B1-225	B1-225

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Step Edge Contrast E2-071





The E2-071 is designed to ensure visibility of steps in escape routes to meet NZBC Clause F6 "Visibility in Escape Routes". The step edge contrast will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

Independently tested in accordance with UL 1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building 30 minutes visibility

Minimum charging illuminance of 20 lux continuously during occupancy.

Risk Group B Building 90 minutes visibility

Minimum charging illuminance of 60 lux continuously during occupancy.

The step edge contrast is suitable for use indoors and outdoors. The anti-slip material provides all weather protection from slips and falls.

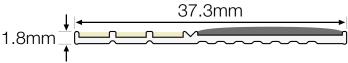
Anti-slip Properties AS/NZS 4586-2004 Classification: FV

UV Resistance

Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%



E2-071 Step Edge Contrast 37mm



SUPPLY

The products are available in lengths of 100mm increments from 600mm to 1500mm to comply with IBC recommendations to mark the escape path on the front edge of the step to within 50mm of the wall or the side of the step.

COMPOSITION

Ecoglo E2-071 Step Edge Contrast is manufactured from extruded 6060T5 aluminium section. Silicon Carbide anti-slip materials and custom made photoluminescent pigment are embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

Indoors the E2-071 can be surface mounted on all smooth surfaces. Outdoors the E2-071 can be surface mounted onto concrete.

Installation is a simple process using adhesive only.

Maximum recommended length for outdoor installation is 1500mm.

Recommended installation adhesive is Bostik Seal'n'Flex FC.

PRODUCT CODE	PRODUCT DESCRIPTION	PRODUCT LENGTH
E2-071-600	Step Edge Contrast 37mm	600mm
E2-071-700	Step Edge Contrast 37mm	700mm
E2-071-800	Step Edge Contrast 37mm	800mm
E2-071-900	Step Edge Contrast 37mm	900mm
E2-071-1000	Step Edge Contrast 37mm	1000mm
E2-071-1100	Step Edge Contrast 37mm	1100mm
E2-071-1200	Step Edge Contrast 37mm	1200mm
E2-071-1300	Step Edge Contrast 37mm	1300mm
E2-071-1400	Step Edge Contrast 37mm	1400mm
E2-071-1500	Step Edge Contrast 37mm	1500mm

Contact

Ecoglo International Limited

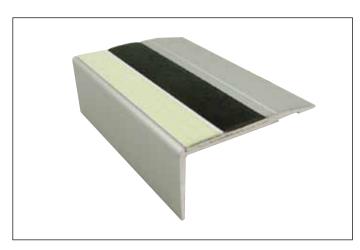
77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Step Nosing F4-171





The F4-171 is designed to ensure visibility of steps in escape routes to meet NZBC Clause F6 "Visibility in Escape Routes". The step nosing will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

Independently tested in accordance with UL 1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 20 lux continuously during occupancy.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 60 lux continuously during occupancy.

The step nosing is suitable for use indoors and outdoors. The anti-slip material provides all weather protection from slips and falls.

Anti-slip Properties

AS/NZS 4586-2004 Classification: FV

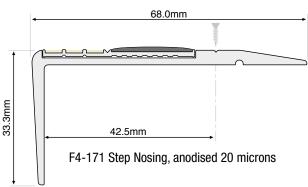
UV Resistance

Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The products are available in lengths of 100mm increments from 600mm to 1500mm to comply with IBC recommendations to mark the escape path on the front edge of the step to within 50mm of the wall or the side of the step.





COMPOSITION

The F4-171 utilises exposed fixers to confirm sound installation for ongoing maintenance inspections and Warrant of Fitness compliance. Step Nosing profile consisting of 6060T5 aluminium extrusion, anodized (natural/silver colour) to 20 microns thickness.

Ecoglo E2-071 Step Edge Contrast is adhesively fixed into the extrusion. The high visibility E2-071 is manufactured from extruded 6060T5 aluminium section. Silicon Carbide anti-slip materials and custom made photoluminescent pigment are embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

The F4-171 can be used on a range of substrates including concrete, timber, tiles, vinyl, steel and checker plate.

Installation is a simple process using fixers (supplied) and adhesive. It can also be fitted over steps with an industrial or commercial style carpet with no underlay. For thicker carpet, cut the carpet away and use a packer.

Maximum recommended length for outdoor installation is 1500mm.

Recommended installation adhesive is Bostik Seal'n'Flex FC.

PRODUCT CODE	PRODUCT DESCRIPTION	PRODUCT LENGTH
F4-171-600	Step Nosing 68mm x 33mm	600mm
F4-171-700	Step Nosing 68mm x 33mm	700mm
F4-171-800	Step Nosing 68mm x 33mm	800mm
F4-171-900	Step Nosing 68mm x 33mm	900mm
F4-171-1000	Step Nosing 68mm x 33mm	1000mm
F4-171-1100	Step Nosing 68mm x 33mm	1100mm
F4-171-1200	Step Nosing 68mm x 33mm	1200mm
F4-171-1300	Step Nosing 68mm x 33mm	1300mm
F4-171-1400	Step Nosing 68mm x 33mm	1400mm
F4-171-1500	Step Nosing 68mm x 33mm	1500mm

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

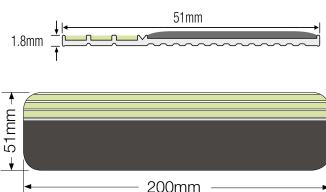
PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 **Fax**: 03 343 6821

Product Data Sheet - Step Edge Pathfinder E3-071-200







The E3-071-200 Pathfinder is designed to ensure visibility of steps in escape routes to meet NZBC Clause F6 'Visibility in Escape Routes.' The 200mm long Step Edge Pathfinder will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

Independently tested in accordance with UL1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 20 lux continuously during occupancy.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 60 lux continuously during occupancy.

The Step Edge Pathfinder is suitable for use indoors and outdoors. The anti-slip material provides all weather protection from slips and falls.

Anti-slip Properties

AS/NZS 4586-2004 Classification: FV

UV Resistance

Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The product is available in packs of 10 x 200mm pieces. Each step can be marked with one or more pieces.

COMPOSITION

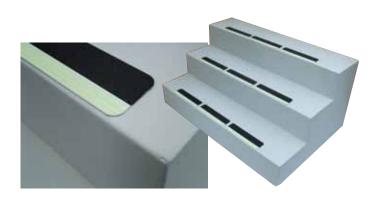
Ecoglo E3-071-200 Step Edge Pathfinder is manufactured from extruded 6060T5 aluminium section. Silicon Carbide anti-slip materials and custom made photoluminescent pigment are embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

The E3-071-200 Step Edge Pathfinder can be surface mounted on all flat surfaces with a 5mm to 10mm space between pieces.

Installation is a simple process using adhesive only.

Recommended installation adhesive is Bostik Seal'n'Flex FC.



Contact

Ecoglo International Limited

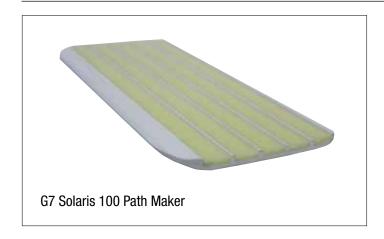
77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Path Marker G7 Solaris 100





The G7 Solaris 100 is designed to ensure visibility of pathways in escape routes to meet NZBC Clause F6 'Visibility in Escape Routes'. The G7 Solaris 100 will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

Independently tested in accordance with UL1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building

30 minutes visibility

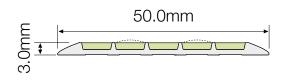
Minimum charging illuminance of 20 lux continuously during occupancy.

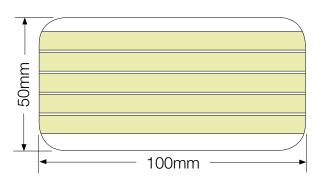
Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 60 lux continuously during occupancy.







The G7 Solaris 100 is suitable for use indoors and outdoors.

UV Resistance

Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The product is available in a pack of 10 x 100mm pieces.

COMPOSITION

Ecoglo G7 Solaris 100 is manufactured from extruded 6060T5 aluminium section. Custom made photoluminescent pigment is embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

Installation is a simple process using adhesive only.

Recommended installation adhesive is Bostik Seal'n'Flex FC.

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Path Marker T6-101





The T6-101 Path Marker is designed to ensure visibility of ramps, corridors and pathways in escape routes to meet NZBC Clause F6 'Visibility in Escape Routes'. The Path Marker will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

Independently tested in accordance with UL1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building

30 minutes visibility

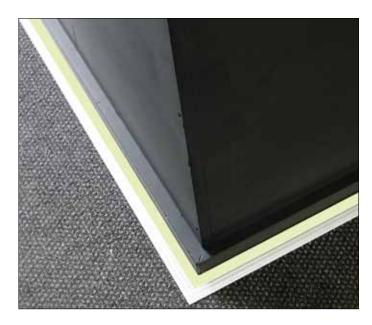
Minimum charging illuminance of 20 lux continuously during occupancy.

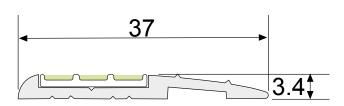
Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 60 lux continuously during occupancy.

The Path Marker is suitable for use indoors and outdoors.





UV Resistance

Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The product is available in 1 metre lengths.

COMPOSITION

The T6-101 Path Marker utilises exposed fixers to confirm sound installation for ongoing maintenance inspections and Warrant of Fitness compliance.

The Path Marker profile consists of 6060T5 aluminium extrusion, anodized (silver colour) to 12 microns thickness.

Ecoglo G3-001 is adhesively fixed into the extrusion. The high visibility G3-001 is manufactured from extruded 6060T5 aluminium section. Custom made photoluminescent pigment is embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

Designed to fit adjacent to a wall or edging, the T6-101 Path Marker can be used on a range of substrates including carpet, concrete, timber, tiles, vinyl, steel and checker plate.

The T6-101 Path Marker can also be used to transition from one floor covering height to another.

Installation is a simple process using fixers (supplied) and/or adhesive. It can also be fitted over an industrial or commercial style carpet with no underlay. For thicker carpet, cut the carpet away and use a packer.

Recommended installation adhesive is Bostik Seal'n'Flex FC.

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Path Marker T5-101





The T5-101 Path Marker is designed to ensure visibility of pathways in escape routes to meet NZBC Clause F6 'Visibility in Escape Routes'. The Path Marker will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

Independently tested in accordance with UL1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building

30 minutes visibility

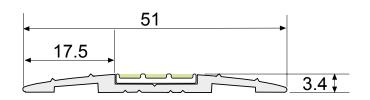
Minimum charging illuminance of 20 lux continuously during occupancy.

Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 60 lux continuously during occupancy.





The Path Marker is suitable for use indoors and outdoors.

UV Resistance

Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The product is available in 1 metre lengths.

COMPOSITION

The T5-101 Path Marker utilises exposed fixers to confirm sound installation for ongoing maintenance inspections and Warrant of Fitness compliance.

The Path Marker profile consists of 6060T5 aluminium extrusion, anodized (silver colour) to 12 microns thickness.

Ecoglo G3-001 is adhesively fixed into the extrusion. The high visibility G3-001 is manufactured from extruded 6060T5 aluminium section. Custom made photoluminescent pigment is embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

The T5-101 Path Marker can be used on a range of substrates including carpet, concrete, timber, tiles, vinyl, steel and checker plate.

Installation is a simple process using fixers (supplied) and/or adhesive. It can also be fitted over an industrial or commercial style carpet with no underlay. For thicker carpet, cut the carpet away and use a packer.

Recommended installation adhesive is Bostik Seal'n'Flex FC.

Contact

Ecoglo International Limited

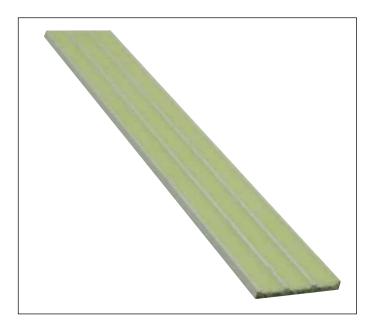
77 Kingsley St, Sydenham 8023

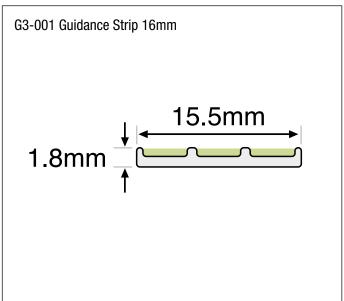
PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Guidance Strip G3-001







The G3-001 is designed to ensure visibility of handrails, pathways (including ramps and corridors) and doorways in escape routes to meet NZBC Clause F6 "Visibility in Escape Routes". The guidance strip will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

Independently tested in accordance with UL1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 20 lux continuously during occupancy.



Risk Group B Building

90 minutes visibility

Minimum charging illuminance of 60 lux continuously during occupancy.

The guidance strip is suitable for use indoors and outdoors.

UV Resistance, Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The products are available in 1 metre lengths.

COMPOSITION

Ecoglo G3-001 Guidance Strip is manufactured from extruded 6060T5 aluminium section. Custom made photoluminescent pigments are embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

Installation is a simple process using double sided foam tape.

Screws or rivets can be used if installation is difficult.

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

Product Data Sheet - Handrail Marker H3-001





The H3-001 Handrail is designed to ensure 90 minutes visibility visibility of handrails in escape routes to meet

NZBC Clause F6 'Visibility in Escape Routes'. The H3-001 Handrail Strip will be effective in all light conditions including during failure of the main lighting.

PERFORMANCE

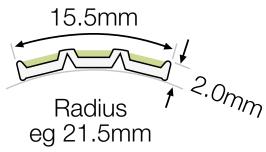
Independently tested in accordance with UL1994 for 10 metre visibility to meet NZBC Clause F6.

Risk Group C Building

30 minutes visibility

Minimum charging illuminance of 20 lux continuously during occupancy.





Risk Group B Building

Minimum charging illuminance of 60 lux continuously during occupancy.

The Handrail Strip is suitable for use indoors and outdoors.

UV Resistance

Loss of luminance after 1000 hrs ASTM G-155 Cycle 1 exposure: <10%

SUPPLY

The Handrail Strips are available in 1 metre lengths.

COMPOSITION

Ecoglo H3-001 Handrail Strip is manufactured from extruded 6060T5 aluminium section. Custom made photoluminescent pigment are embedded in thermoset polyester carriers to integrally bond the active ingredients into the aluminium following curing at high temperature. The photoluminescent area is also recessed into protective channels.

INSTALLATION

Installation is a simple process using double sided foam tape.

Screws or rivets can be used if adhesion is difficult.

Contact

Ecoglo International Limited

77 Kingsley St, Sydenham 8023

PO Box 7698, Sydenham 8240, Christchurch, New Zealand

Phone: 03 348 3781 Fax: 03 343 6821

MSDS MATERIAL SAFETY DATA SHEET

January 2013

1. Supplier Details

Company: Ecoglo International Ltd

Address: 77 Kingsley St, Sydenham, Christchurch 8440, New Zealand

Phone No.: +64 3 348 37881

2. Product Name

Ecoglo S20 Flat Panel Signs including:

RM1616-16m, RM2222-24m, RMR2916-16m, RMR4222-24m, RML2916-16m, RML4222-24m, EX2313-16m, EX2816-24m, EE6128-16m, EE7835-24m, NE4113-16m, AR1616-16m, and AR2222-24m

3. Composition

Component	CAS No.	Proportion
Aluminium Alloy (5005)	-	40-70%
Strontium Aluminate based photoluminescent pigment	-	10-40%
Cross-linked thermoset polyester based resins	-	10-30%
Other components	-	<0.2%

4. Physical Properties

Appearance: Solid sheet material

Odour: N/A
Melting Point N/A
Specific gravity 2.2-2.7
% Volatile N/A
Vapour pressure N/A
Vapour density N/A
Solubility in water Insoluble

5. Stability and Reactivity

Hazardous reactions: None known Radioactivity: Not Radioactive

6. Fire and Explosion Hazard

Fire: Not easily combustible. Passes Bombadier SMP 800-C Toxic gas generation test

Explosion: Not explosive

7. Health Hazards

None known.

Safe Handling

Sheet edges may be sharp. Use gloves.

9. Storage

No special requirements.

10. Ecological information/ Disposal

Offcuts can be sent for Aluminium recycling.

11. Transport Information

Not restricted.

This information is offered in good faith to the best of our current knowledge. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with use of the material, or the results to be obtained from the use thereof, is made. Ecoglo Interational Ltd assumes no responsibility for damage or injury from the use of this product.

January 2013

1. Manufacturer Details

Company: Ecoglo International Ltd

Address: 77 Kingsley St, Christchurch 8440, New Zealand

Phone No.: +64 3 348 37881

2. Product Name

MSDS

Ecoglo F4-171 Step Nosing including:

F4-171-600, F4-171-700, F4-171-800, F4-171-900, F4-171-1000, F4-171-1100, F4-171-1200,

F4-171-1300, F4-171-1400, F4-171-1500

3. Composition

Component	CAS No.	Proportion
Aluminium Alloy (6063)	-	80-95%
Strontium Aluminate based Photoluminescent pigment	-	2-5%
Cross-linked thermoset Polyester based resins	-	4-10%
Silicon Carbide	-	2-5%
Other components	-	< 3.4%

4. Physical Properties

Appearance: Solid Strip material

Odour: N/A
Melting Point N/A
Specific gravity 2.2-2.7
% Volatile N/A
Vapour pressure N/A
Vapour density N/A
Solubility in water Insoluble

5. Stability and Reactivity

Hazardous reactions: None known Radioactivity: Not Radioactive

6. Fire and Explosion Hazard

Fire: Not easily combustible. Passes Bombadier SMP 800-C Toxic gas generation test

Explosion: Not explosive

7. Health Hazards

None known.

8. Safe Handling

Cut edges may be sharp. Use gloves.

9. Storage

No special requirements.

10. Ecological information/ Disposal

Offcuts can be sent for Aluminium recycling.

11. Transport Information

Not restricted.

This information is offered in good faith to the best of our current knowledge. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with use of the material, or the results to be obtained from the use thereof, is made. Ecoglo International Ltd assumes no responsibility for damage or injury from the use of this product.

1. Manufacturer Details

Ecoglo International Ltd Company:

77 Kingsley St, Christchurch 8440, New Zealand Address:

Phone No.: +64 3 348 37881

2. Product Name

Ecoglo E2-071 Contrast including:

E2-071-600, E2-071-700, E2-071-800, E2-071-900, E2-071-1000, E2-071-1100, E2-071-1200,

E2-071-1300, E2-071-1400, E2-071-1500

3. Composition

Component	CAS No.	Proportion
Aluminium Alloy (6063)	-	50-80%
Strontium Aluminate based Photoluminescent pigment	_	0-10%
Cross-linked thermoset Polyester based resins	-	10-30%
Silicon Carbide	-	5-20%
Other components	-	<0.5%

4. Physical Properties

Appearance: Solid Strip material

Odour: N/A **Melting Point** N/A Specific gravity 2.2-2.7 % Volatile N/A Vapour pressure N/A Vapour density N/A Solubility in water Insoluble

5. Stability and Reactivity

Hazardous reactions: None known Radioactivity: Not Radioactive

6. Fire and Explosion Hazard

Fire: Not easily combustible. Passes Bombadier SMP 800-C Toxic gas generation test

Explosion: Not explosive

7. Health Hazards

None known.

8. Safe Handling

Cut edges may be sharp. Use gloves.

9. Storage

No special requirements.

10. Ecological information/ Disposal

Offcuts can be sent for Aluminium recycling.

11. Transport Information

Not restricted.

This information is offered in good faith to the best of our current knowledge. No warranty, expressed or implied. regarding the accuracy of this data, the hazards connected with use of the material, or the results to be obtained from the use thereof, is made. Ecoglo International Ltd assumes no responsibility for damage or injury from the use of this product.

MSDS MATERIAL SAFETY DATA SHEET

January 2013

1. Supplier Details

Company: Ecoglo International Ltd

Address: 77 Kingsley St, Christchurch 8440, New Zealand

Phone No.: +64 3 348 37881

2. Product Name

Ecoglo Escape Route Products including:

G3-001, H3-001

3. Composition

Component	CAS No.	Proportion
Aluminium Alloy (6063)	-	60-80%
Strontium Aluminate based Photoluminescent pigment	-	5-15%
Cross-linked thermoset Polyester based resins	_	10-30%
Other components	-	<0.2%

4. Physical Properties

Appearance: Solid Strip material

Odour: N/A
Melting Point N/A
Specific gravity 2.2-2.7
% Volatile N/A
Vapour pressure N/A
Vapour density N/A
Solubility in water Insoluble

5. Stability and Reactivity

Hazardous reactions: None known Radioactivity: Not Radioactive

6. Fire and Explosion Hazard

Fire: Not easily combustible. Passes Bombadier SMP 800-C Toxic gas generation test

Explosion: Not explosive

7. Health Hazards

None known.

8. Safe Handling

Cut edges may be sharp. Use gloves.

9. Storage

No special requirements.

10. Ecological information/ Disposal

Offcuts can be sent for Aluminium recycling.

11. Transport Information

Not restricted.

This information is offered in good faith to the best of our current knowledge. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with use of the material, or the results to be obtained from the use thereof, is made. Ecoglo Ltd assumes no responsibility for damage or injury from the use of this product.



Ecoglo International Limited

PO Box 7698, Sydenham 8240, 77 Kingsley Street, Sydenham 8023 Christchurch New Zealand

> Phone: 03 348 3781 Fax: 03 343 6821 Email: info@ecoglo.com www.ecoglo.co.nz



Some years ago Sir Richard Hadlee decided to shorten his run up - Different, innovative, controversial, but a new approach. Fans and pundits debated it, but Sir Richard knew he was right.

He had done his homework and his research told him he could bowl just as fast with even greater control. And it meant a longer playing career.

The records fell and the rest is history.

SIR RICHARD HADLEE

Just like Sir Richard, Ecoglo has done the research and knows the numbers. Using the same professional approach Ecoglo is now bringing innovation to emergency lighting.



Innovation in Emergency Lighting

Phone: +64 3 348 3781 www.ecoglo.co.nz