

Everlux LLL

Photoluminescent safety signage system for floor level installation
Low Location Lighting System

1. Product

Everlux®-LLL Photoluminescent safety signage system for floor level installation (*Low Location Lighting System*)

2. Product Description

LLL system suitable for vertical applications (signs and strips for walls): 2 mm rigid plastic with a high photoluminescent intensity, antistatic and easy to clean.

LLL system suitable for horizontal applications (signs, strips for floors and stairs and "L" shapes for stair/step application): 0.3mm non-slip self-adhesive polycarbonate with a high photoluminescent intensity and easy to clean.

Everlux Discs:

- Everlux Disc - 0.3mm non-slip self-adhesive polycarbonate disc with a high photoluminescent intensity and easy to clean. Everlux metallic disc - 1mm aluminium disc coated with a 0.3mm non-slip self-adhesive polycarbonate surface with a high photoluminescent intensity and easy to clean.
- Everlux metallic disc - 1mm aluminium disc coated with a 0.3mm non-slip self-adhesive polycarbonate surface with a high photoluminescent intensity and easy to clean. The discs are also supplied with a butterfly screw for use with metallic structures

3. Positioning and Mounting

As per the Everlux LLL section featured in the Everlux catalogue (Pg. 22)

4. Fire ReactionSigns and strips for walls:

LLL products are all manufactured to be non-inflammable and, self-extinguishable corresponding to fire resistance class M1. The materials used have high fire resistance properties and do not help propagate fire. They are classified as being flame-retardant in accordance to Norm IEC 60092-101:2002.

5. Abrasion and Slip-ResistanceStrips and signs for floors and stairs and "L" for stairs:

Everlux®-LLL photoluminescent, polycarbonate self-adhesive strips are rated as having a high level of abrasion resistance being classified as Abrasion Class (PEI) IV in accordance with EN ISO 10545-7:2000. This is quantified as being the product's resistance to wear and tear caused by the passing of people and movement of objects,

The coefficient of friction is the parameter that characterises slip resistance. **Everlux®-LLL** photoluminescent, polycarbonate self-adhesive strips are classified as being a safe anti-slip product where the coefficient of friction is >0.70). According to norm ASTM C 1028-96 the strips present the following results:

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Static coefficient of friction of **Everlux®-LLL**

Dry	0.76
Humid	0.71

According to DIN 51130:2004, that evaluates the anti-slip properties, **Everlux®-LLL** Strips and signs present the following results:

Anti-Slip Properties **Everlux®-LLL**

Angle	18,1°
Evaluation	R 10

The classification R10 (according to BGR 181) provides a guarantee that **Everlux®-LLL** photoluminescent, polycarbonate self-adhesive strips and signs are suitable for installation in the following applications: *halls, commercial kitchens, hotels, exposition halls, shops, sanitary and dressing rooms, laundries, warehouses, parking places, schools, health services (laboratories, doctor's offices, pharmacies, waiting rooms...etc.*

6. Corrosion Resistance

Metallic discs:

Metallic discs (with or without butterfly screw attachment) are manufactured using Zincor®. Zincor® is a metallic base product which is supplied with a zinc coating that has been applied using an electrolysis process. This process ensures that the oxidation of the zinc is inhibited by chemical treatment which, in turn, provides a good resistance to corrosion. The surface characteristics Zincor® include a smooth surface finish which is highly resistant to corrosion, characteristics which make this material suitable for use in the automotive industry, in electrical applications, steel furniture and accessories for a variety of application areas.

6. Photoluminescent Properties

Everlux®-LLL products fully conform to the International Norms ISO 16069:2004 and IMO A.752 (18) Resolution. When stimulated with an ambient light emitting 25 lux for 15 minutes the photoluminescent characteristics are as follows:

Time after removing the exciting light (in minutes)	Luminescent intensity (mcd/sqm)
10 minutes	80 ¹
60 minutes	10
Luminescent intensity 100 times greater than the limit of human visibility	Period of light decay (minutes)
0.32 mcd/m ²	1000

¹The luminescent intensity of the non-slip self-adhesive strips on the floor may be lower due to the protective layer of the polycarbonate.

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7. Dimensions, Pictograms and Colours

The products conform with the Everlux catalogue and are according to National and International Norms and Legislation.

8. Printing

Serigraph process using high quality gloss paint with UV resistance.

9. CleaningSigns and strips for walls:

The products do not require any particular attention and can be cleaned using either with a dry or damp clean cloth. Do not use detergent products.

Strips and signs for floors and stairs:

As a preference, the products require manual cleaning using water and no detergents. The use of automatic cleaning systems with brushes must be assessed with regard to the aggressiveness and pressure of the relevant cleaning system being considered.

10. GuaranteeSigns and strips for walls:

Under normal conditions of mounting and with appropriate cleaning we offer a 5 years guarantee.

For exterior applications, consideration regarding exposure to factors such as varying temperatures, humidity and other extreme environments must be given as this can result in the guarantee being affected.

Strips and signs for floors and stairs:

④ Everlux®-LLL photoluminescent, polycarbonate self-adhesive strips have a high abrasion resistance and are classified as being Abrasion Class (PEI) IV (in accordance to norm EN ISO 10545-7:2000)

This classification means that in terms of application the product is adequate for floors which have a high level of traffic (i.e. people and moving objects) such as industrial applications and public areas (hotels, exhibition halls, shops, parking places, etc).

For a maximum durability of the ④ Everlux®-LLL strips the type and state of floor on which it is to be placed, the type of traffic and the methods of cleaning have to be adequate.

The ④ Everlux®-LLL polycarbonate self adhesive strips and signs have had excellent results in

- Metro stations (platform limitation and fire exit staircases)
- Stores
- Warehouses in which fork lifts are used.
- Floors in industrial premises having high wear and tear from fork lifts.

Metallic discs:

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11. Health and safety

The product does not contain any radioactive substances and in terms of toxicity the product is considered safe according to the European Norm EN 71-3.

12. Quality and Certification

④ Everlux®-LLL products have Lloyd's Register Type Approval Certification.

The quality of ④ Everlux®-LLL products is ensured and maintained by means of a rigorous process of quality control using testing measures conducted in our own laboratory whilst observing all applicable Norms and Standards;

13. Legislation and Normative references

All of our signs fully conform to the following Norms:

- ISO 16069:2004
- ISO 7010:2011
- Norms ISO 3864
- ISO 15370: 2010(Ships)
- IMO Resolution A.752 (18)
- Norms DIN 67510