

Everlux LLL

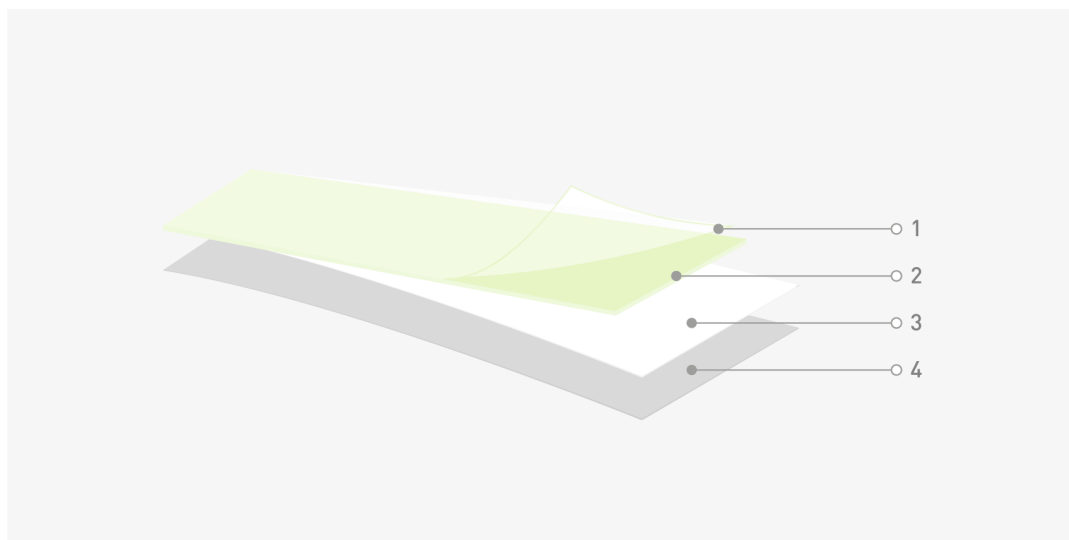
Photoluminescent safety signage system for floor level installation
Low Location Lighting System

1. Product

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

2. Product Description

LLL system suitable for horizontal applications (signs, strips for floors and stairs and “L” shapes for stair/step application): 0.62mm non-slip self-adhesive polycarbonate with a high photoluminescent intensity and easy to clean.



- 1- Anti-slip clear polycarbonate (0.3 mm)
- 2- Photoluminescent layer (0.12 mm)
- 3- Adhesive layer (0.2 mm)
- 4 – Backing

3. Adhesive proprieties

Characteristics		Performance
Peel Adhesion to Stainless Steel (180° Peel at 300mm/min)		15.5 N/cm
Static Shear (Stainless Steel 25mmx 25mm)	23°C / 1kg	10 000 mins
	65°C / 0.5kg	10 000 mins
Service temperature		-40°C - 85°C
Solvent Resistance		Good
UV Resistance		Very Good

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4. Abrasion and Slip-Resistance

Strips 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:

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.*

5. Photoluminescent Properties

Ⓢ **Everlux®-LLL** products fully conform to the standard BS ISO 16069:2017, DIN 67510-1:2021 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/m ²)
10 minutes	80 ¹
60 minutes	10 ¹
Luminescent intensity 100 times greater than the limit of human visibility	Period of light decay (minutes)
0.3 mcd/m ²	1000

¹ The 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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- When stimulated with ambient light of only 1000 lux during 5 minutes, the photoluminescent characteristics are as follows:

Time after removing the exciting light (in minutes)	Luminescent intensity (mcd/m ²)
10 minutes	150 ¹
60 minutes	21 ¹
Luminescent intensity 100 times greater than the limit of human visibility	Period of light decay (minutes)
0.3 mcd/m ²	2000 ¹

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

6. Dimensions, Pictograms and Colours

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

7. Printing

Process using high quality gloss paint with UV resistance.

8. Positioning and Mounting

The installation of the product must follow the following indications:

Preparation of the application surface:

All surfaces on which signs are to be installed shall be considered as contaminated.

Cleaning and Degreasing - For this operation a degreasing solution must be used; for example, isopropyl alcohol in the proportion 70% isopropyl alcohol and 30% water.

The cleaning operation must be done in two phases:

- Start by applying the degreasing solution to the surface and clean the whole surface in circular movements with a paper or cloth that does not leave residues, to remove dirt and grease;
- Proceed by applying a second dosage of the degreasing solution to the surface and, this time, cleaning it with movements in only one direction.

Drying – Let it dry, waiting 2 to 3 minutes until all cleaning solution evaporates. Do not touch the previously cleaned and degreased surfaces with your fingers.

Primary application – Apply a thin, uniform coating to the bonding surface. Use the minimum amount that will fully coat the area to be taped.

Application may be done with a clean lint-free cloth, pad, felt tipped dauber, absorbent paper towel or disposable tissue. Brushes, rollers, or spraying tend to apply excessive amounts should therefore be avoided.

Allow to dry completely prior to application of adhesive safety sign. Depending on temperature and humidity, the drying and reacting time of adhesion promoter can vary. Typical drying time will be 1-2 minutes.

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Apply the adhesive safety sign within 8 hours or reapply adhesion promoter.
We suggest the usage of 3M™ Adhesion Promoter 111.

Product application

Removal of the protective paper from the sign adhesive - Remove the adhesive backing paper in one corner of the product without touching the adhesive.

Application of the product - Apply the sign in the previously prepared place, avoiding the formation of bubbles and exerting pressure throughout the sign area. It is recommended to use a roller for better distribution of forces throughout the surface.

The quality of the adhesion will depend on the amount of contact between the adhesive and the installation surface. A strong, homogenous pressure promotes union.

The application should be made at the room temperature between 15°C and 25°C, and never be less than 15°C.

Once applied, at the recommended application temperature, possible temperature changes are generally well tolerated by the glue, without modifying the adhesion properties of the glue.

Adhesion time - Until adhesion is considered complete, some time is required: approximately 50% final adhesion is obtained after 20 minutes, 90% after 24 hours and 100% after 72 hours (at room temperature).

Caution - before installation it is essential that the installer evaluate the surface where the signs are to be installed:

Rough or porous surfaces - A rough or porous surface will not allow the application of self-adhesive elements and may require other installation type.

Parallelism of the surface to be installed - Surface parallelism is essential to adhesion quality. On surfaces where there is no complete parallelism, the need for alternative installation solutions such as mastic glue or structural glue, or bolting to support structures or directly to the surface, must be considered.

Curved Surfaces - Self-adhesive products are ideal for flat surfaces. Although the application on curved surfaces is possible, it must be verified in each case whether the tension created by the curvature of the surface does not exceed the adhesiveness of the product.

Special surfaces - Some surfaces have special characteristics such as the presence of coatings that impart specific characteristics to the surfaces. This type of surface usually has a low surface energy and may require special preparation. It is the responsibility of the installer to evaluate the surface and, if necessary, to ask the manufacturer for instructions on the correct preparation of the surface.

For further information please consult the Everlux Installation Guide for self-adhesive products:



9. Cleaning

As a preference, the products require manual cleaning. The use of automatic cleaning systems with brushes must be assessed about the aggressiveness and pressure of the relevant cleaning system being considered.

10. Guarantee

In normal conditions of installation and adequate cleanness and maintenance, the sign is covered with a 2-year warranty against manufacturing defects.

Considering exposition to varying temperatures, humidity and other extreme environments and type of traffic this guarantee can be reduced.

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For a maximum lifetime of the ☒ **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 shall be adequate.

The ☒ **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 forklifts are used;
- Floors in industrial premises having high wear and tear from forklifts.

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

The quality of ☒ **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 Standards and regulations.

13. Legislation and Normative references

All of our signs fully conform to the following regulations:

- BS ISO 16069
- BS 5499-4
- BS EN ISO 7010
- Norms BS ISO 3864
- IMO Resolution A.752 (18)
- DIN 67510-1