

Lumenite® Light Sleeve Installation Instructions

Where to Install

Install Lumenite® Light Sleeves in any space where the inadvertent loss of artificial light may endanger life or safety. General offices, factories/industrial work areas, mines, subways, public transport stations, shipping, oil & gas rigs, elevators, car parks, switchboard rooms, hospitals, public buildings, egress routes, stairwells, fire escapes, hallways,.

- General Work Areas - Cover 10 to 20% of fittings
- Egress Routes - Cover every second fitting, up to every fitting, ie 50 to 100% of fittings depending upon spacing, height and environment
- Exit points - Cover every fitting above exit points

How to Install

- 1) Switch off the electricity supply and ensure the lamp fixture has been correctly installed and maintained
- 2) Remove the fluorescent lamp from the light fixture and slide it into the Lumenite® Light Sleeve
- 3) Fit the supplied end caps to both ends of the Light Sleeve
- 4) Replace the fluorescent lamp back into the light fixture and switch on the electricity supply

Lumenite® Light Sleeves should be installed by suitably qualified persons and are to be fitted only to correctly installed and maintained fixtures.

As a guide, items to confirm include, but are not limited to; matched fluorescent tube and ballast (wattage and type), good pin contact, lamp condition, and supply voltage.

The sleeve is not designed for use with compact fluorescent lamps operating at elevated temperatures.

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The four step installation process is as follows:

1. Switch off the lights to be fitted with a LUMENITE Light Sleeve.
2. Remove the fluorescent tube from the light fitting and slide into the LUMENITE Light Sleeve.
3. Fit the supplied end caps to both ends of the sleeve.
4. Replace the fluorescent tube in the light fitting to complete.



Lumenite® Light Sleeve

Specifications

Description:

The Lumenite® Light Sleeve is a failsafe^{*(note 1)}, environmentally friendly^{*(note 2)} hollow tube which encases standard T8 and T12 fluorescent lamps and is held in place by end caps which are supplied as standard with the Light Sleeve, or alternatively with custom retainer rings ^{*(note 3)}.

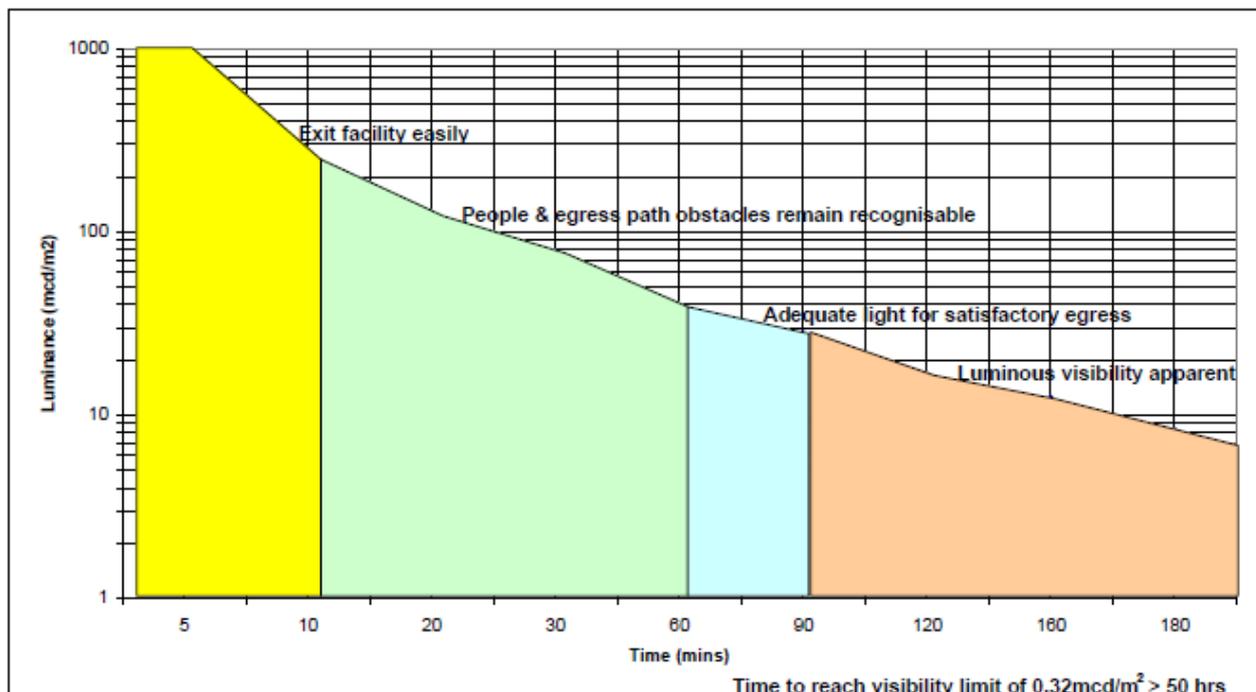
The Light Sleeve consists primarily of a blend of polymers, photoluminescent pigment, binding and suspension agents, and ultra-violet light inhibitors. The Lumenite® Light Sleeve absorbs energy from the fluorescent lamp when it is on, and releases that energy in the form of light upon the light source being removed.

The unique characteristic of the Lumenite® Light Sleeve is that unlike conventional photoluminescent products which are designed to 'be seen' after the normal light source has been removed, the Lumenite® Light Sleeve emits usable light 'for seeing', projecting it onto the surfaces of pathway obstructions thereby providing visual guidance and enabling safe and expedient movement and evacuation when needed.

The amount of light emitted diminishes over time^{*(see graph below)}. During the critical initial stages of an emergency evacuation the light output from the Lumenite® Light Sleeve is at its strongest. A fully charged Lumenite® Light Sleeve will remain visible for in excess of 50 hours^{*(note 4)} providing a 'bread crumb' effect^{*(note 5)} after the projected light is insufficient to highlight pathway obstructions.

Notes:

- 1) Cannot fail – the only requirement for the Lumenite® Light Sleeve to work is that it is 'charged' by an adequate light source, i.e. the lamp that it encases must be on to excite the photoluminescent chemicals
- 2) Non-toxic, non-radioactive, uses no electricity and therefore requires no wiring or batteries or other components
- 3) Retainer rings are especially suitable for situations where a Light Sleeve may be shorter than the fluorescent lamp, e.g. a 600mm Light Sleeve fitted to a 1200mm lamp. The retainer rings hold the Light Sleeve in position allowing constant spacing and air circulation around the lamp



- 4) The accepted threshold of human eye visibility is 0.32 milli-candelas per square metre. A fully charged Lumenite® Light Sleeve will take in excess of 50 hours to diminish to this level.
- 5) 'Bread Crumb' effect means that the escape route can still be identified by following the line of visible Lumenite® Light Sleeves.

Specifications:

The Lumenite® Light Sleeve is a patented product and to minimize the risk of the patent being breached we do not publish the formula, method of production, or detailed design specifications.

Visual Characteristics:

Light Loss

In situ, with the Lumenite® Light Sleeve fitted to a standard fluorescent lamp, the lumen loss in normal service is approximately 20%. It is generally not recommended that Light Sleeves be fitted to every lamp (see Installation Instructions, Where to Install), therefore the light reduction in available light is negligible and should not be a concern provided the original lighting design includes tolerances and the lamp has not exceeded its half-life rating. Should it be necessary to overcome any lumen loss there are two effective ways of doing so:

- a) Replace standard white lamps with more efficient triphosphour lamps
- b) Fit readily available reflectors to increase projected light. This option has the benefit of also increasing the projected light from the Lumenite® Light Sleeve when the lights are off.

Colour

When the fluorescent lamp is illuminated the Lumenite® Light Sleeve 'softens' the glare index but the shift in colour from the fluorescent lamp is negligible.

When the light source is removed the Lumenite® Light Sleeves project a green light. This colour is the most powerful we can achieve from a photoluminescent product and is the internationally accepted colour for safety. It is also, coincidentally the colour that represents environmental friendliness.

Time to 'Charge'

It takes only 4-5 minutes with the lights on to excite the photoluminescent pigment adequately due to the very close proximity to the fluorescent lamp that it encases.

Standard Lumenite® Light Sleeve Sizes

Cat No.

1200mm (48") T8 lamp	LLS-T8-48
1200mm (48") T12 lamp	LLS-T12-48
600mm (24") T8 lamp	LLS-T8-24
600mm (24") T12 lamp	LLS-T12-24
Custom Sleeve Retainer for T8 lamp (pair)	LCSR-T8
Custom Sleeve Retainer for T12 lamp (pair)	LCSR-T12

Other sizes are available upon request.

Specifications subject to change without notice