Irish Standard
I.S. 3217:2008

Emergency Lighting

I.S. 3217:2008

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Údarás um Chaighdeáin Náisiúnta na hÉireann

DECLARATION

OF

SPECIFICATION

ENTITLED

EMERGENCY LIGHTING

AS

THE IRISH STANDARD SPECIFICATION FOR

EMERGENCY LIGHTING

NSAI in exercise of the power conferred by section 16 (5) of the National Standards Authority of Ireland Act, 1996 (No. 28 of 1996) and with the consent of the Minister for Enterprise, Trade and Employment, hereby declare as follows:

1. This instrument may be cited as the Standard Specification (Emergency lighting) Declaration, 2008.

2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Emergency lighting.

   (2) The said standard specification may be cited as Irish Standard 3217:2008 or as I.S. 3217:2008.

3. (1) The Standard Specification (Code of practice for emergency lighting) Declaration 1989, is hereby revoked.

   (2) Reference in any other standard specification to the Instrument hereby revoked and to Irish Standard 3217:1989 thereby prescribed, shall be construed, respectively, as references to this instrument and to Irish Standard 3217:2008.

Contents

Foreword

The aim of this Irish Standard is to promote wider understanding of the different types of emergency lighting systems and modes of operation which may be employed, and to give guidance on their correct application in accordance with the European standards, to the varied requirements of different categories of premises.

The emergency lighting is an integral part of the overall design of the premises.

This Standard has been prepared with the assistance of the National Standards Authority of Ireland Fire Safety Standards Committee, representation on which includes the following:

- Association of Consulting Engineers of Ireland
- Department of the Environment;
- Office of Public Works;
- Institution of Fire Engineers;
- The Electro-Technical Council of Ireland;
- Electrical Contractors Association;
- Association of Electrical Contractors of Ireland;
- Electrical Manufacturers and Distributors Association of Ireland (EMDA);
- Emergency lighting manufacturers.

The recommendations given in the Standard have been drawn up to encourage uniformity of application, based on providing adequate safety to persons in the event of interruption of the supply to the normal lighting and having due regard to the hazard level and degree of familiarity of occupants with particular premises. The Standard recognizes that in addition to ensuring safe unobstructed means of escape from the premises at all times, emergency lighting is needed to assist in the immediate location and operation of fire alarm call points and fire fighting equipment, and to minimize the chance of panic arising in enclosed spaces, such as lifts.

Refer to the National Rules for Electrical Installations (ET 101), published by The Electro-Technical Council of Ireland for wiring requirements.

Compliance with an Irish Standard does not of itself confer immunity from legal obligations.

Introduction

Emergency lighting is provided for use when the supply to the normal lighting fails and is therefore powered from a source independent of that supplying the normal lighting.

For the purposes of this Standard, emergency lighting is regarded as a generic term of which there are a number of specific forms, as shown below.

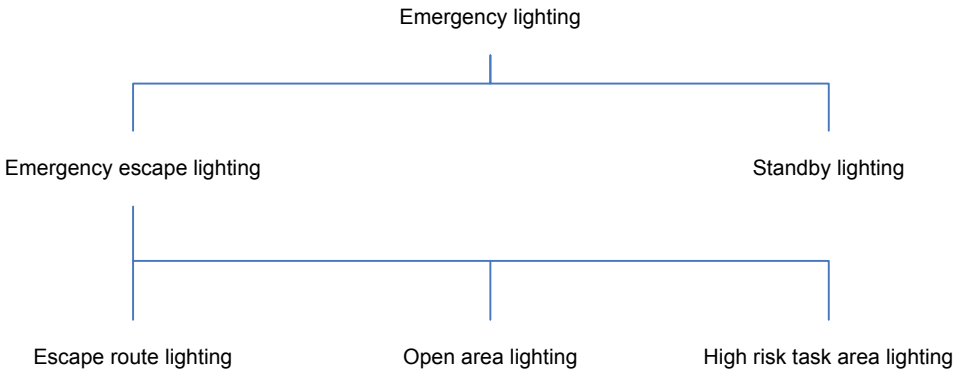

Figure 1 — Specific forms of emergency lighting

The requirements given in this Standard are a minimum for design purposes and are calculated for the full rated duration period and end of design life of the equipment; the contribution to illumination by reflected light is ignored.

The overall objective of emergency escape lighting is to enable safe exit from a location in the event of failure of the normal supply.

The objective of escape route lighting is to enable the safe exit from a location for occupants by providing appropriate visual conditions and direction finding on escape routes and in special locations, and to ensure that fire fighting and safety equipment can be readily located and used.

The objective of open area (anti-panic) lighting is to reduce the likelihood of panic and to enable safe movement of occupants towards escape routes by providing appropriate visual conditions and direction finding. The flow of light for escape routes or open areas should be downward to the working plane but illumination should also be provided to any obstruction up to 2 m height above that plane.

The objective of high-risk task area lighting is to contribute to the safety of people involved in a potentially dangerous process or situation and to enable proper shut down procedures to be carried out for the safety of other occupants of the location.

There are emerging techniques that when applied to escape routes in addition to conventional emergency lighting luminaries can enhance their effectiveness in an emergency. These techniques are not included in this standard.

Vision varies from person to person, both by the amount of light required to perceive an object clearly and in the time taken to adapt to changes in the luminance. In general, order people need more light and take a longer time to adapt to low luminance on a hazard or escape route.

Much anxiety and confusion can be alleviated by strategically placed signs indicating the way out of a location. It is very important that exits are clearly signposted and are visible, whenever the location is occupied.

Schedule

Emergency Lighting

1 Scope

This Standard concerns the provision of electric emergency lighting in most types of premises.

This Standard does not cover single domestic premises. The provisions are applicable to common access routes within places of multiple occupancy.

The Standard gives requirements for the clear indication and safe level of illumination of escape routes in the event of failure of the supply to the normal lighting, and the minimum continuous period of operation for emergency lighting.

2 Normative references

This Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments to or revisions of any of these publications apply to this Irish Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

I.S. EN 13032-1:2004, *Light and Lighting - Measurement and Presentation of Photometric Data of Lamps and Luminaires - Part 1: Measurement and File Format*

I.S. EN 13032-2:2005, *Light and Lighting - Measurement and Presentation of Photometric Data of Lamps and Luminaires - Part 2: Presentation of Data for Indoor and Outdoor Work Places*

I.S. EN 13032-3:2007, *Measurement and Presentation of Photometric Data of Lamps and Luminaires - Part 3: Presentation of Data for Emergency Lighting of Work Places*

I.S. EN 1838:1999, *Lighting Applications - Emergency Lighting*

I.S. EN 50171:2001, *Central Power Supply Systems*

I.S. EN 50172:2004, *Emergency Escape Lighting Systems*

I.S. EN 50200:2006, *Method of Test for Resistance to Fire of Unprotected Small Cables for Use in Emergency Circuits*

I.S. EN 60529:1993/A1:2003, *Degrees of Protection Provided by Enclosures (IP Code)*

I.S. EN 60598-2-22:1999/A1:2003, *Luminaires - Part 2-22: Particular Requirements - Luminaires for Emergency Lighting*

I.S. EN 62034:2007, *Automatic Test Systems for Battery Powered Emergency Escape Lighting*

ET 101, *National Rules for Electrical Installations*

ET 105, *National Rules for Electrical Installations in Potentially Explosive Atmospheres*

ISO 8528-12:1997, *Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets - Part 12: Emergency Power Supply to Safety Services*