BSI Standards Publication

Daylight in buildings

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National foreword

This British Standard is the UK implementation of EN 17037:2018, incorporating corrigendum October 2021. It supersedes BS 8206-2:2008, which is withdrawn.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by CEN corrigendum October 2021 is indicated in the text by 〖AC〉 〈AC〗.

The UK participation in its preparation was entrusted to Technical Committee EL/1, Light and lighting applications.

A list of organizations represented on this committee can be obtained on request to its committee manager.

The UK committee draws users' attention to National Annex NA, which provides further recommendations to assist users in the application of this standard.

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EUROPÄISCHE NORM

December 2018

ICS 91.160.01

English Version

Daylight in buildings

Lumière naturelle dans les bâtiments

Tageslicht in Gebäuden

This European Standard was approved by CEN on 29 July 2018 and includes the Corrigendum issued by CEN on 13 October 2021.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 17037:2018+AC:2021) has been prepared by Technical Committee CEN/TC 169 “Light and Lighting”, the secretariat of which is held by DIN.

This document includes the corrigendum EN 17037:2018/AC:2021 issued by CEN on 13 October 2021, which corrects symbol "d_W" in Table 1, the table reference in the 5th paragraph of E.3.1 and replaces Table E.8.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags ▌〈AC〉 〈AC〉▐.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Introduction

Daylight should be a significant source of illumination for all spaces with daylight opening(s). Daylight is strongly favoured by building occupants as a way to adequately illuminate the indoor surfaces, and to save energy for electrical lighting.

Daylight can provide significant quantities of light indoors, with high colour rendering and variability, changing through the day and the seasons. Daylight openings provide views and connection to the outside and contribute to the psychological well-being of occupants. A daylight opening can also provide exposure to sunlight indoors, which is important, for example, in dwellings, hospital wards and nurseries. In a space, where activities comparable to reading, writing or using display devices are carried out, a shading device should be provided to reduce visual discomfort. The standard addresses daylighting performance over the year. Daylight should illuminate spaces during a significant fraction of the annual daylight hours over the year. Daylight provision depends firstly on the availability of daylight outside (i.e. the prevailing climate at the site) and, thereafter, the environment surrounding the building, the components immediate around the daylight opening and the configuration of the interior spaces.

This standard encourages building designers to assess and ensure successfully daylit spaces. It also allows building designers and developers to target ambitions with respect to daylighting, as well as addressing other issues related to daylight design, such as view out, protection against glare, and exposure to sunlight.

1 Scope

This document specifies elements for achieving, by means of natural light, an adequate subjective impression of lightness indoors, and for providing an adequate view out. In addition, recommendations for the duration of sunshine exposure within occupied rooms are given.

This document gives information on how to use daylighting to provide lighting within interiors, and how to limit glare. This document defines metrics used for the evaluation of daylighting conditions and gives principles of calculation and verification. These principles allow to address the issue of variability of daylight over the days and the year.

This document applies to all spaces that may be regularly occupied by people for extended periods except where daylighting is contrary to the nature and role of the actual work done.

The specification of lighting requirements for humans in indoor work places including visual tasks are given in EN 12464-1 and are not part of this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12216, *Shutters, external blinds, internal blinds — Terminology, glossary and definitions*

EN 12464-1, *Light and lighting — Lighting of work places — Part 1: Indoor work places*

EN 12665:2018, *Light and lighting — Basic terms and criteria for specifying lighting requirements*

EN 14501:2005, *Blinds and shutters — Thermal and visual comfort — Performance characteristics and classification*

ISO 15469:2004, *Spatial distribution of daylight — CIE standard general sky*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12665:2018 and the following apply.

3.1
daylight
visible part of global solar radiation

Note 1 to entry: Also defined as part of global solar radiation capable of causing a visual sensation [CIE ILV 278].

[SOURCE: EN 12665:2018, 3.4.7, modified – note to entry added]