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Conservation of cultural heritage - Guidelines and procedures for choosing appropriate lighting for indoor exhibitions

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Supersedes CEN/TS 16163:2014

English Version

Conservation of cultural heritage - Guidelines and procedures for choosing appropriate lighting for indoor exhibitions

Conservation du patrimoine culturel - Lignes directrices et procédures concernant le choix d'un éclairage adapté pour les expositions en intérieur

Erhaltung des kulturellen Erbes - Leitlinien und Verfahren für die Auswahl geeigneter Beleuchtung für Innenausstellungen

This European Standard was approved by CEN on 18 November 2024.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN 16163:2024) has been prepared by Technical Committee CEN/TC 346 “Conservation of Cultural Heritage”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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.

This document supersedes CEN/TS 16163:2014.

EN 16163:2024 includes the following significant technical changes with respect to CEN/TS 16163:2014:

Since the publication of the CEN/TS 16163 in 2014, the technology of lighting has evolved considerably and an update of the content has proven to be necessary. In addition to taking into account technological advances and new calculation methods in the field of lighting in recent years, the present version of the standard contains the elements of good practices for the exhibition lighting design, in its subjective form, as an element of museography, which had not found its place in the previous version.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

Lighting is needed for many specific functions in museums and other cultural heritage buildings, such as research, conservation and permanent or temporary exhibitions. Lighting is one of the most important factors enabling visitors to fully enjoy works of art and other cultural property. In fact, lighting is a key medium in which visitors interpret and appreciate cultural heritage. Light is needed to see well but this can present a challenge when what is being viewed will deteriorate in the presence of light. When displaying exhibits as a part of Cultural Heritage, it is essential to consider a controlled use of light, to preserve them for the future generations. Indeed, light is an environmental factor, which is a threat to many objects. Alone or in combination with other environmental factors (temperature, humidity, pollution, etc.) light causes fading, discoloration and embrittlement of a wide range of materials. This damage is cumulative and irreversible: no conservation treatment can restore original appearance of colours and the material characteristics. Therefore, the challenge of museum exhibition lighting is to find an appropriate compromise between the long-term preservation of the object and the needs of visitors to view them within a suitable exhibition design. As an integral part of exhibition lighting, the following aspects should be considered, mentioned below without priority:

— the conservation aspect, related to the sensitivity of the exhibit at different wavelengths of the incident radiant energy, the spectral composition of the light source and the total luminous exposure;

— the visual aspect, related to the impact of lighting on the visitor experience: lighting should allow visitors to see exhibits on display, with the correct colour perceptions without glare, reflections or insufficient illumination;

— the design aspect related to the concept and position of the exhibition architecture, the point of view of the curator and all others involved in the purpose and/or didactic objectives of the exhibition.

This document uses terms defined in European and International (CIE International lighting vocabulary) terminology standards, but their definitions have been adapted to the intended users of this document.

1 Scope

This document defines the procedures as well as the means to implement adequate lighting, with regard to the exhibition lighting and the conservation policy. This also includes security and cleaning lighting. It takes visual, exhibition and conservation aspects into account and it also discusses the implications of the lighting design on the safeguarding of cultural heritage. This document gives recommendations on luminous exposure values. It aims to provide a tool for setting up a common European policy and a guide to help curators, conservators and project managers to assess the correct lighting that can ensure the safeguarding of the objects. This document covers indoor lighting for heritage objects on exhibition in both public and private sites and does not consider lighting in other cultural heritage contexts such as open-air collections, etc.

This document does not cover non-public activities such as conservation-restoration, storage, emergency lighting and research.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN